2024 King County Comprehensive Plan Update Draft Environmental Impact Statement

Prepared for

King County

Prepared by

Parametrix

2024 King County Comprehensive Plan Update Draft Environmental Impact Statement. Prepared by Parametrix, Inc., Seattle, Washington. December 2023.

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ACRONYMS AND ABBREVIATIONS

2024 Update 2024 King County Comprehensive Plan Update

ADU Accessory Dwelling Unit

AIAN American Indian and Alaska Native

AMI Area Median Income

APD Agricultural Production District

BP Before Present

CARA Critical Aquifer Recharge Area

Current Plan 2016 King County Comprehensive Plan, last updated December 2022

County King County

CPP Countywide Planning Policy

CWSP Coordinated Water System Plans

DNRP King County Department of Natural Resources and Parks

Ecology Washington State Department of Ecology

EIS Environmental Impact Statement

EPA United States Environmental Protection Agency

ESA Endangered Species Act

FPD Forest Production District

GHG Greenhouse Gas

GMA Washington State Growth Management Act

GMPC Growth Management Planning Council

I-5 Interstate 5

I-405 Interstate 405
I-90 Interstate 90

K.C.C. King County Code

LGBTQIA+ Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual, Plus Other

Orientations and Identities

Metro King County Metro Transit Department

MPP Multicounty Planning Policy

NAAQS National Ambient Air Quality Standards

NHOPI Native Hawaiian or Other Pacific Islander

PAA Potential Annexation Area

ACRONYMS AND ABBREVIATIONS (CONTINUED)

PM Particulate Matter

PSCAA Puget Sound Clean Air Agency
PSRC Puget Sound Regional Council
RCW Revised Code of Washington

SCAP King County Strategic Climate Action Plan
SEPA Washington State Environmental Policy Act

SMP Shoreline Master Program
SOV Single-Occupancy Vehicle

TDR Transfer of Development Rights

UGA Urban Growth Area
USC United States Code

WAC Washington Administrative Code

WSDOT Washington State Department of Transportation

WUI Wildland Urban Interface

SEPA FACT SHEET

Project Title

2024 King County Comprehensive Plan Update.

Nature and Location of Proposed Action and Alternatives

The 2024 King County Comprehensive Plan Update is a nonproject action related to unincorporated King County, Washington.

Location

King County, Washington.

Applicant

King County.

SEPA Lead Agency

King County.

Responsible SEPA Official

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Required Approvals

The King County Council will need to adopt the 2024 King County Comprehensive Plan Update.

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Authors and Principal Contributors

This Draft EIS has been prepared under the direction of King County Executive and Council staff. Authors and contributors to the Draft EIS include:

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Date of Draft EIS Issuance

December 7, 2023.

Comment Deadline for Draft EIS

January 31, 2024.

Commenting on the DEIS

Comments may be submitted through several methods, as noted below:

Mail: Ivan Miller

SEPA Responsible Official 401 5th Avenue, Suite 800 Seattle, WA 98104

Email: Please send comments to the SEPA Responsible Official at compplan.sepa@kingcounty.gov.

Public Meeting: A public meeting will be held, as follows:

January 18, 2024

6:30 p.m.

King County Courthouse, 516 3rd Avenue Room 1001, Seattle, WA 98104

Testimony can be provided at this meeting in person or over Zoom. Information on how to provide public testimony can be found at the webpage for the King County Council's Local Services and Land Use Committee: [LINK]

Date of Final EIS Issuance

King County anticipates issuing a Final EIS in November 2024.

Timing of Final Agency Action

King County anticipates taking final agency action on the 2024 Comprehensive Plan Update by December 2024.

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Type and Timing of Subsequent Environmental Review

Subsequent project-level review will be completed, as needed, for project actions occurring under the 2024 King County Comprehensive Plan Update.

Location of Background Information

Background information on the 2024 King County Comprehensive Plan Update can be found here: [LINK]

Draft EIS Availability

A copy of this Draft EIS may be found here: [LINK]

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EXECUTIVE SUMMARY

Proposed Action

The King County Comprehensive Plan is a key policy document that guides how growth and development will occur within unincorporated King County over the next 20 years. It guides King County (County) decisions and services, such as:

- Where homes, offices, or stores can be built.
- How roads, buildings, and trees contribute to the look and feel of neighborhoods.
- Where investments in transit and parks should be made.
- How to protect working farms and forests.
- How to ensure access to clean water, clean air, and a healthy environment.

The County is updating its Comprehensive Plan to meet the most recent goals and requirements of the Washington State Growth Management Act (GMA). The 2024 King County Comprehensive Plan Update (2024 Update) provides an opportunity to make substantive policy changes that address the community's long-term needs and advance the County's policy goals. The GMA-required update must be completed by December 31, 2024.

The 2024 Update is rooted in the value of making King County a welcoming community where every person can thrive. In support of this value, the 2024 Update has three focus areas: equity, housing, and climate change and the environment.

Proposal Objectives

The 2024 Update includes an overarching goal of fostering a welcoming community where every person can thrive and is focused on equity, housing, and climate change and the environment in order to:

- Implement the current GMA, Multicounty Planning Policies (MPPs), and Countywide Planning Policies (CPPs).
- Reflect, create alignment with, and advance current plans, regulations, and practices.
- Ensure consistency between the Plan and the King County Code.

Specific objectives include:

- Reducing housing and business displacement and advancing equity for those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those who also earn less than 80 percent of the Area Median Income (AMI).
- Integrating a pro-equity and anti-racist policy framework that improves outcomes for those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those who earn less than 80 percent of the AMI.
- Improving health equity outcomes in communities with the greatest and most acute needs.
- Aligning housing policies and regulations with the CPPs and Washington State Engrossed Second Substitute House Bill 1220 (Chapter 254 Laws of 2021).

- Improving affordable housing supply, especially for those who are Black, Indigenous, People of Color, immigrants and/or refugees, especially those that earn less than 80 percent of the AMI.
- Expanding housing options at all levels of affordability.
- Aligning with and advancing the King County 2020 Strategic Climate Action Plan¹ to reduce greenhouse gas emissions, support sustainable and resilient communities, and prepare for climate change.
- Integrating and implementing the County's Clean Water, Healthy Habitat goals.
- Increasing the amount of land that is preserved for conservation.
- Implementing CPPs.
- Addressing the outcomes of the County's Subarea Planning Program.
- Updating transportation policies.
- Improving regulations governing rural and natural resources.
- Implementing land use designation and zoning classification changes.

Alternatives Considered for Analysis

The State Environmental Policy Act (SEPA) requires that an environmental impact statement (EIS) analyze the probable adverse environmental impacts of a range of reasonable alternatives, including a "no action" alternative (Washington Administrative Code (WAC) 197-11-402(1) and WAC 197-11-060(3)). For nonproject proposals, such as the 2024 Update, SEPA encourages agencies to describe the proposal in terms of alternative means of accomplishing a stated objective rather than a preferred solution (WAC 197-11-442(2)).

Accordingly, the alternatives evaluated in this Draft EIS are intended to illustrate alternate means of implementing the current GMA, MPPs, and CPPs; reflecting, creating alignment with, and advancing current plans, regulations, and practices; and updating the 2016 King County Comprehensive Plan, last updated December, 2022 (Current Plan), and the King County Code. When adopted, the 2024 Update may be one of the alternatives or blend components of multiple alternatives together.

Additional detail or changes to the proposal will be reflected in the Final EIS, consistent with WAC 197-11-405. The 2024 Update proposed by the King County Executive may be accessed on the King County website and includes changes that are the same as or similar to changes included in each of the action alternatives. The King County Council may also propose variations from the Executive Recommended Plan and the proposals included in each of the action alternatives. The range of potential impacts from the action alternatives is anticipated to cover the potential impacts from the adopted 2024 Update.

Features Common to All Alternatives

Three alternatives are proposed, as described below. All three of the alternatives, which include the No Action, Limited Change, and Extensive Change alternatives, would:

• Include goals and policies that address, to varying degrees, equity, housing, and climate change and the environment.

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¹ King County, 2020 Strategic Climate Action Plan as adopted in Motion 15866, 2021. [LINK]

² King County, 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

- Build on existing growth patterns.
- Allow growth that is below existing capacity within unincorporated King County. All alternatives
 assume the same estimated growth capacity within urban unincorporated areas, which was
 determined to be 7,386 housing units and 1,680 jobs, as identified in the 2021 Urban Growth
 Capacity Report.³

While the capacity for growth is consistent among all three alternatives, the growth assumptions underlying the alternatives vary between the No Action and action alternatives.

- The No Action Alternative carries forward the growth targets from the 2012 CPPs. These growth targets are higher than the 2021 CPP targets. The No Action Alternative anticipates about 9,000 new housing units and 6,800 new jobs within urban unincorporated King County.
- The two action alternatives use the policy and regulatory framework from the 2021 CPPs and the associated growth targets. The action alternatives anticipate 5,412 new housing units and 3,340 new jobs within urban unincorporated King County.

No Action Alternative

The No Action Alternative would retain the Current Plan and associated land use designations, zoning classifications, and development standards. Under this alternative, the County would not update the Current Plan or King County Code to align with the current GMA, MPPs, or CPPs that have not already been included in the Plan updates made since the last statutory update.

The Current Plan includes goals and policies aimed at addressing equity, housing, and climate change and the environment that would remain in effect. For example, the Current Plan policies support community development tools, such as food innovation districts and residential local improvement districts; commit to exploring increasing housing density and affordable housing near businesses and transit; and include Rural Area policies intended to avoid incompatible uses.

Action Alternative 1: Limited Change Alternative

The Limited Change Alternative consists of amendments to the Current Plan goals and policies as well as related land use designations, zoning classifications, and development standards that would meet the proposal objective through a smaller-scale approach. The Limited Change Alternative would generally:

- Implement smaller, more incremental changes over time, using essentially the same level of resources as the Current Plan and within existing regulatory authority.
- Include voluntary programs, incentives, and policies that support the proposal objectives, as opposed to mandates or requirements.
- Not expand the applicability of existing requirements, programs, incentives, or policies to new or larger geographic areas beyond where a similar framework already applies.

For example, the Limited Change Alternative would seek to achieve the proposal objectives by adopting policies that further encourage or incentivize, but not mandate, inclusionary housing.

The Limited Change Alternative is generally anticipated to facilitate more minor changes with both potential positive and adverse impacts to the environment over time. It would also include minor

³ King County, 2021 Urban Growth Capacity Report, 2021. [LINK]

technical amendments and incorporate statutorily required changes. Please see Chapter 2 in the Draft EIS for a table of examples of 2024 Update proposals under the Limited Change Alternative.

Action Alternative 2: Extensive Change Alternative

The Extensive Change Alternative consists of amendments to the Current Plan goals and policies as well as related land use designations, zoning classifications, and development standards that would meet the proposal objective through broader, more major changes. The Extensive Change Alternative would generally:

- Implement more substantial changes than the Limited Change Alternative and could require additional resources and regulatory authority.
- Include mandatory programs and requirements that advance the proposal objectives rather than only voluntary programs, incentives, or policies.
- In some instances, expand the applicability of existing requirements, programs, incentives, and policies to new or larger geographic areas beyond where a similar framework already applies.

For example, the Extensive Change Alternative would seek to achieve the proposal objectives by expanding mandatory inclusionary housing to all unincorporated areas.

The Extensive Change Alternative is generally anticipated to have more substantial changes with both positive and adverse impacts to the environment compared to the Limited Change Alternative. It would also include minor and technical amendments and incorporate statutorily required changes. Please see Chapter 2 in the Draft EIS for a table of examples of 2024 Update proposals under the Extensive Change Alternative.

Summary of Impacts and Mitigation Measures

This section summarizes the impacts of the proposed action alternatives. In general, the action alternatives being considered for the 2024 Update would result in overall positive impacts to both the natural and built environment. However, in some instances there would be trade-offs where an action may have benefits within one area of the environment and detriments to another. The Draft EIS considers whether the proposal will have significant adverse environmental impacts rather than considering whether those are outweighed by any beneficial aspects. The 2024 Update is not anticipated to result in any probable significant adverse impacts, so no mitigation measures are proposed for either action alternative. However, avoidance and minimization measures are nonetheless identified throughout this Draft EIS where potential impacts could be further reduced. Development under all alternatives would be guided by existing regulations and policies that prevent or minimize potential impacts to the environment.

Please see Chapters 3 and 4 in the Draft EIS for a more detailed discussion of the affected environment, anticipated impacts, and potential avoidance and minimization measures for each element of the environment.

No Action Alternative

Under the No Action Alternative, development would continue under the goals and policies of the Current Plan and existing land use designations, zoning classifications, and development standards. Some progress would continue to be made in meeting the County's objectives to address equity, housing, and climate change and the environment, though perhaps not as far as under the Limited or

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Extensive Change alternatives. Following are *examples* of potential impacts from the No Action Alternative, whether positive or negative.

Natural Environment

King County would not be expected to meet its greenhouse gas emission reduction goals under the No Action Alternative without additional incentives to curb the use of fossil fuels and transition to alternative forms of energy. Development would follow existing density patterns, resulting in a greater increase in impervious surfaces, reduction of tree cover in urban unincorporated areas, and possible pressure to develop unprotected farmland and forestland as compared to the action alternatives.

Built Environment

Under the No Action Alternative, the Current Plan would be inconsistent with recent amendments to the GMA, the MPPs, and King County CPPs. This would affect the County's ability to accommodate and manage urban growth in alignment with regional planning efforts. While the County would continue existing and planned efforts to address housing affordability under the No Action Alternative, it may not be able to keep pace with the high demand. Similarly, while the County has plans to address equitable access to parks and open space resources, inequities could continue to exist for urban unincorporated residents. Also, current maintenance backlogs for the transportation network would continue to affect access to and availability of public transit options for vulnerable communities.

Limited Change Alternative

The Limited Change Alternative includes voluntary programs, incentives, and policies to implement smaller, more incremental changes related to land use, zoning classifications, and development standards. The County would be expected to make progress in meeting its objectives to address equity, housing, and climate change and the environment under this alternative to a greater degree than under the No Action Alternative, though not as far as under the Extensive Change Alternative. Following are *examples* of potential impacts from the Limited Change Alternative, whether positive or negative.

Natural Environment

The Limited Change Alternative would incentivize several actions that, collectively, would help the County reduce its greenhouse gas emissions and protect water resources, farmland, critical areas, and natural habitat from development to a greater degree than under the No Action Alternative. However, the Limited Change Alternative could result in the conversion of Rural Area and Natural Resource Lands through policies that provide expanded allowances for the development of renewable energy, resorts, or industrial uses. The Limited Change Alternative would also incentivize active production of farmland in agricultural zones, which could result in greater localized water quality impacts within areas zoned for agriculture as compared to the No Action Alternative.

Built Environment

Changes to density allowances and incentives for inclusionary housing under the Limited Change Alternative would increase the variety of housing options and lead to development patterns within and closer to existing urban areas to a greater degree than the No Action Alternative. This would support housing for a broader range of income levels and more efficient expansion of utility and public services than compared to the No Action Alternative. Allowances for temporary and emergency housing would support short-term housing needs, though may impact social service providers. The Limited Change

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Alternative could result in potentially greater preservation of open space than the No Action Alternative, through changes to the County's Transfer of Development Rights (TDR) and Four-to-One programs. At the same time, those changes could alter the geographic pattern of land designated for conservation, including greater urban development within unincorporated rural areas. Tourism, resort, and economic development-oriented buildings would be allowed to a greater degree in the Rural Area, on Natural Resource Lands, and within agricultural zones than under the No Action Alternative, which could result in development inconsistent with the existing character of those areas.

Extensive Change Alternative

The Extensive Change Alternative includes mandatory programs and requirements to implement more substantial changes related to land use, zoning classifications, and development standards compared to the Limited Change Alternative. The County would be expected to make progress in meeting its objectives to address equity, housing, and climate change and the environment under this alternative to a greater degree than under both the No Action Alternative and Limited Change Alternative. Following are *examples* of potential impacts from the Extensive Change Alternative, whether positive or negative.

Natural Environment

In comparison to the Limited Change Alternative, the Extensive Change Alternative would help the County to a greater degree in meeting its greenhouse gas emissions reduction goals and protecting water resources, farmland, critical areas, and natural habitat from development. However, the Extensive Change Alternative could result in a greater conversion of Rural Area and Natural Resource Lands through policies that provide expanded allowances for the development of renewable energy, resorts, or industrial uses than the other alternatives. The Extensive Change Alternative would require, rather than incentivize, active production of farmland in agricultural zones, which could result in greater localized water quality impacts within areas zoned for agriculture as compared to the Limited Change Alternative.

Built Environment

The Extensive Change Alternative includes greater allowances for density and requirements for inclusionary housing than the Limited Change Alternative. It could increase the variety of housing options and lead to development patterns within and closer to existing urban areas and those served by public transit. This would support housing for a broader range of income levels and lead to a more efficient expansion of utility and public services than compared to the Limited Change Alternative. Substantial increases in allowances for temporary and emergency housing would support short-term housing needs, though could necessitate an increase in social service provider staff and resources.

The Extensive Change Alternative would conserve more land as rural through the TDR Program and make more substantive updates to the Four-to-One Program requirements, including changes that are more likely to increase participation. As with the Limited Change Alternative however, the Extensive Change Alternative could alter the geographic pattern of land designated for conservation, including greater urban development within unincorporated rural areas. Tourism, resort, and economic development-oriented buildings would be allowed to a greater degree in the Rural Area, on Natural Resource Lands, and within agricultural zones, which could result in development inconsistent with the existing character of those areas.

Significant Areas of Controversy and Uncertainty and Issues to be Resolved

The environmental review has identified and addressed the significant policy areas being addressed in the 2024 Plan update. Numerous factors create uncertainty for the implementation of the plan, such as the real estate market and private market financing, state planning and public financing, and others.

Because the 2024 Update process is happening concurrently with the production of this Draft EIS, there is uncertainty around which proposals will ultimately be adopted by the 2024 Update. During this process, the King County Executive proposed an Executive Recommended Plan to the King County Council. Over the next year, the King County Council will review and amend the proposals ahead of adoption in late 2024. Due to the uncertainty around adopted proposals, this Draft EIS evaluates alternatives which attempt to cover a range of proposals and their potential environmental impacts. As discussed in the section above, Alternatives Considered for Analysis, the 2024 Update may be one of the EIS alternatives or a blend of proposals from multiple alternatives, consistent with SEPA.

There is also uncertainty around the identification of a preferred alternative. SEPA does not require a preferred alternative to be identified for non-project proposals, though the lead agency may select one or more. If the County chooses to select a preferred alternative, it will be identified in the Final EIS.

1. INTRODUCTION

The King County Comprehensive Plan is a key policy document that guides how growth and development will occur within unincorporated King County over the next 20 years. It guides County decisions and services, such as:

- Where homes, offices, or stores can be built.
- How roads, buildings, and trees contribute to the look and feel of neighborhoods.
- Where investments in transit and parks should be made.
- How to protect working farms and forests.
- How to ensure access to clean water, clean air, and a healthy environment.

The 2024 King County Comprehensive Plan Update (2024 Update) is an opportunity to make substantive policy changes that address the community's long-term needs and advance the County's policy goals. This update also meets requirements of the Washington State Growth Management Act (GMA) to complete a comprehensive review and update to the Comprehensive Plan to ensure compliance with GMA goals and requirements. The GMA-required update must be completed by December 31, 2024.

The 2024 Update is rooted in the value of making King County a welcoming community where every person can thrive. In support of this value, the 2024 Update has three focus areas: equity, housing, and climate change and the environment.

1.1 Background

King County adopted its first Comprehensive Plan in 1964 (Ordinance 263) and its first major update to the Comprehensive Plan in 1985 (Ordinance 7178). The 1985 Plan established an urban growth boundary to encourage growth in areas with existing infrastructure and ensure affordable housing and diversity in communities while protecting critical habitat, open spaces, and Natural Resource Lands. Pursuant to the Washington State Environmental Policy Act (SEPA; Chapter 197-11 Washington Administrative Code (WAC)), King County prepared an Environmental Impact Statement (EIS) to evaluate the potential environmental effects of the 1985 Plan.

In 1990, the Washington State Legislature enacted the GMA to promote coordinated and planned growth, conservation and wise use of lands, environmental protection, sustainable economic development, public health and safety, and a high quality of life. The GMA lists several goals to guide cities and counties in their planning efforts that address urban growth, affordable housing, multimodal transportation systems, protection of natural resources and the environment, public facilities and services, open space and recreation, and the involvement of the public in the planning process, among others.

In anticipation of passage of the GMA, King, Kitsap, Pierce, and Snohomish counties built upon their existing coordination efforts to form the Puget Sound Regional Council (PSRC), a Regional Transportation

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⁴ Revised Code of Washington (RCW) 36.70A.010.

⁵ For the purposes of the Comprehensive Plan EIS process, the term "cities" includes incorporated towns. It does not include unincorporated Rural Towns.

⁶ RCW 36.70A.020.

Planning Organization under Chapter 47.80 RCW. Shortly after the GMA was enacted, PSRC adopted Vision 2020, a regional planning document to address where and how Central Puget Sound would grow and meet transportation, economic, and housing needs for people living and working in the region. Vision 2020 strategies and Multicounty Planning Policies (MPPs) were consistent with the intent of the GMA to anticipate and manage growth over a 20-year planning horizon. PSRC continues to develop policies and coordinate decisions about regional growth, transportation, and economic development planning; it adopted VISION 2040 in 2008 and adopted VISION 2050, the current regional plan, in 2020. PSRC is composed of nearly 100 members, including the four counties as well as the cities, towns, ports, state and local transportation agencies, and Tribal governments within the Central Puget Sound region.

In 1992, King County and the cities within its boundaries established interlocal agreements to form the Growth Management Planning Council (GMPC). The GMPC developed the Countywide Planning Policies (CPPs) to meet the GMA's requirements for coordinated planning among all the jurisdictions within King County. The initial CPPs, adopted through Ordinance 10450 and updated through Ordinance 11446, served as the framework for all comprehensive plans. The CPPs also recommended, and then the Comprehensive Plan adopted, an Urban Growth Area (UGA) for King County, where the most growth and development was projected to occur, with goals to reduce urban sprawl, protect the Rural Area, and to efficiently provide roads, parks, and services. The CPPs were substantively updated in 2012 to reflect the updated MPPs in VISION 2040. The most recent substantive update to the CPPs occurred in 2021 with Ordinance 19384 to reflect the updated MPPs in VISION 2050, and they were amended again with Ordinance 19553.

In November 1994, the County issued a Supplemental EIS for the 1994 Comprehensive Plan Update, which built on the environmental documentation completed for the 1985 Comprehensive Plan. The 1994 Comprehensive Plan, adopted through Ordinance 11575, was the first plan adopted to meet GMA requirements. In 1995, the County updated the development regulations necessary to implement the Comprehensive Plan through Ordinance 11653.

Between 1995 and 1997, the County conducted annual reviews of the Comprehensive Plan and, starting in 1998, limited annual reviews to technical changes only. This process allowed for substantial policy changes and issues to be addressed only during major update cycles, the first of which occurred in 2000. Another Supplemental EIS to the 1985 EIS was completed in November of 2000 to evaluate the environmental impacts of the 2000 Comprehensive Plan.

The County conducted subsequent quadrennial reviews and significant revisions to the Comprehensive Plan in 2004, 2008, 2012, 2016, and 2020. These updates relied on existing environmental documents, including the 1985 EIS, the 1995 Supplemental EIS, and the 2000 Supplemental EIS. Specific impacts from these updates were described in addenda to those existing environmental documents. The County has also adopted existing environmental documents from other agencies, including the EISs from PSRC related to VISION 2040 and VISION 2050.

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⁷ PSRC, VISION 2040, April 2008. [LINK]; PSRC, VISION 2050: A Plan for the Central Puget Sound Region, October 2020. [LINK]

The current 2016 King County Comprehensive Plan, last updated December 6, 2022 and referred to here as "the Current Plan," has a planning horizon of 2006 through 2031 and includes the following components:

- Executive Summary.
- Chapter 1 Regional Growth Management Planning.
- Chapter 2 Urban Communities.
- Chapter 3 Rural Areas and Natural Resource Lands.
- Chapter 4 Housing and Human Services.
- Chapter 5 Environment.
- Chapter 6 Shorelines.
- Chapter 7 Parks, Open Space and Cultural Resources.
- Chapter 8 Transportation.
- Chapter 9 Services, Facilities and Utilities.
- Chapter 10 Economic Development.
- Chapter 11 Community Service Area Subarea Planning.
- Chapter 12 Implementation, Amendments and Evaluation.
- Glossary.
- Various technical appendices and adopted subarea plans.

King County is required to complete its next periodic comprehensive plan review, evaluation, and update by December 31, 2024, and every 10 years thereafter. The County must consider population allocations, UGA densities, locations of growth in the cities and County, protection of critical areas, and other key factors in its review for the 2024 Update.⁸

1.2 Study Area

The "study area" for this Draft EIS consists of unincorporated King County, which is the area governed by the King County Comprehensive Plan, and includes the Urban Area, Rural Area, and Natural Resource Lands. Amendments to the Current Plan may impact elements of the environment beyond the political boundaries of the plan's jurisdiction, so any discussion of areas or impacts outside of unincorporated King County are included only to the extent that those areas or impacts are related to the proposed updates or provide context for issues that cross jurisdictional borders.

⁸ RCW 36.70A.130.

1.3 Existing Policy and Regulatory Framework

Washington State Growth Management Act

Comprehensive plans and development regulations (codes) within King County must be consistent with the provisions of the GMA.

Key provisions of the GMA include the following:

- Planning Goals.
- MPPs.
- CPPs.
- Local Comprehensive Plans.
- Urban Area, Rural Area, and Natural Resource Lands.
- Review and Evaluation Program (sometimes referred to as the Buildable Lands Program).
- Development Regulations.

GMA Planning

As described in Section 1.1, Background, the GMA sets forth planning goals to guide the development and adoption of comprehensive plans and development regulations by counties and cities. With the GMA goals as a guide, jurisdictions subject to the GMA, including King County, must prepare comprehensive plans that include maps and text describing the objectives, principles, and standards used to develop the comprehensive plan. ¹⁰

All elements of the comprehensive plan must be consistent with the future land use map. Required elements of the comprehensive plan include land use, housing, capital facilities, utilities, transportation, and, for counties only, the Rural Area and on Natural Resource Lands. ¹¹ Economic development and parks and recreation are required when funding is provided, but jurisdictions often prepare the elements to meet state and local goals and grant opportunities; King County's Comprehensive Plan includes an Economic Development element and a Parks, Open Space, and Cultural Resources element. In the 2023 session, the legislature amended the GMA to require planning for Climate Change and Resiliency in comprehensive plans; those updates are not required until the 2029 and 2034 comprehensive plan updates. ¹² Local governments may include other elements if they wish, including subarea plans. ¹³ All development regulations, such as zoning classifications or critical areas ordinances, must be consistent with a county or city's comprehensive plan. ¹⁴

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⁹ RCW 36.70A.020.

¹⁰ RCW 36.70A.070.

¹¹ Ibid.

¹² Engrossed Second Substitute House Bill 1181. [LINK]

¹³ RCW 36.70A.080.

¹⁴ RCW 36.70A.040.

Puget Sound Regional Council – VISION 2050 – Multicounty Planning Policies

The GMA also requires the adoption of MPPs for larger counties with a contiguous urban area, such as those in the Central Puget Sound region.¹⁵

In King, Kitsap, Snohomish, and Pierce counties, MPPs serve as the regional framework for growth management. They guide land use, economic development, public services, environmental planning, and transportation projects within Central Puget Sound. MPPs serve three key roles:

- Implementing the Regional Growth Strategy.
- Creating a common planning framework for local plans and CPPs.
- Providing the policy structure for other regional plans.

VISION 2050 establishes the region's MPPs. It is the current regional plan for managing growth over the coming decades in King, Kitsap, Pierce, and Snohomish counties. It was prepared by PSRC in coordination with its member jurisdictions and approved by the PSRC General Assembly in October 2020.

VISION 2050's Regional Growth Strategy calls for new housing, jobs, and development in regional growth centers and near High-Capacity Transit. Regional growth centers are located within Metropolitan Cities and Core Cities and are characterized by compact, pedestrian-oriented development with a mix of uses and are envisioned as a major focal point of higher-density population and employment, with efficient multimodal transportation infrastructure and services. The Regional Growth Strategy also aims to keep the Rural Area, farmlands, and forests healthy and thriving.

VISION 2050 incorporates a focus on locating growth in more compact, walkable, and transit-served locations. VISION 2050 includes a goal for 65 percent of the region's population growth, anticipated to reach 5.8 million people by 2050, and 75 percent of the region's employment growth, forecasted to be 3.4 million jobs by 2050, to be in regional growth centers and within walking distance of High-Capacity Transit. VISION 2050's Regional Growth Strategy calls for High-Capacity Transit Communities—cities and urban unincorporated areas with existing or planned high-capacity transit investments—to accommodate 24 percent of the region's population growth (approximately 1.4 million people) and 13 percent of its employment growth by the year 2050. This regional-scale goal provides a benchmark to inform local planning and continue to focus new growth as transit investments come into service.

Within King County, most population and job growth (approximately 95 percent) will go to incorporated Metropolitan Cities and Core Cities, followed by High-Capacity Transit Communities, some of which are located in urban unincorporated King County.

Countywide Planning Policies

The 2021 CPPs, adopted through Ordinance 19384 and amended by Ordinance 19553, provide guidance to incorporate changes to the regional policy framework in advance of the 2024 Update and reflect new priorities addressing equity and social justice within communities in King County. The CPPs create a shared and consistent framework for growth management planning between the County and the 39 cities within King County, in accordance with RCW 36.70A.210. The CPPs implement the MPPs and

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¹⁵ RCW 36.70A.210(7) and WAC 365-196-305(8).

provide more specific details to guide County and local comprehensive planning by including the following:

- Policies to implement the UGA.
- Policies for the promotion of contiguous and orderly development and provision of urban services.
- Policies for siting public capital facilities of countywide or statewide nature.
- Policies for countywide transportation facilities and strategies.
- Policies that consider the need for affordable housing for all economic segments of the population and parameters for its distribution.
- Policies for joint County and city planning within the UGA.
- Policies for joint countywide economic development and employment.
- Fiscal impact analysis.
- Policies that address the protection of Tribal cultural resources, developed in collaboration with Indian Tribes.

As required by the GMA, the CPPs adopt the 2019 through 2044 housing and job growth targets for each jurisdiction within the County, as well as urban unincorporated areas of the county.

As shown in Table 1.1-1, Urban Unincorporated King County 2019–2044 Growth Targets (Non-High-Capacity Transit Communities), unincorporated areas in the County that are not High-Capacity Transit Communities have a growth target of 1,292 housing units and 700 jobs by 2044. As shown in Table 1.1-2, Urban Unincorporated King County 2019–2044 Growth Targets (Associated with High-Capacity Transit), Communities the urban unincorporated areas identified as Potential Annexation Areas (PAAs) and classified in VISION 2050 as High-Capacity Transit Communities have a growth target of 4,120 new housing units and 2,640 new jobs.

Table 1.1-1. Urban Unincorporated King County 2019–2044 Growth Targets, Non-High-Capacity Transit Communities

2019–2044 Growth Targets	Housing Units	Jobs
Auburn PAA	12	0
Bellevue PAA	17	0
Black Diamond PAA	328	0
Issaquah PAA	35	0
Kent PAA	3	300
Newcastle PAA	1	0
Pacific PAA	134	0
Redmond PAA	120	0
Sammamish PAA	194	0
Unaffiliated Urban Unincorporated	448	400
Urban Unincorporated Subtotal	1,292	700

Source: 2021 King County Countywide Planning Policies (King County 2022)

Table 1.1-2. Urban Unincorporated King County 2019–2044 Growth Targets, Associated with High-Capacity Transit Communities

2019–2044 Growth Targets	Housing Units	Jobs
Federal Way PAA	1,020	720
North Highline PAA	1,420	1,220
Renton PAA- East Renton	170	0
Renton PAA- Fairwood	840	100
Renton PAA- Skyway/West Hill	670	600
High-Capacity Transit Unincorporated Subtotal	4,120	2,640

Source: 2021 King County Countywide Planning Policies (King County 2022)

Local Comprehensive Plans

Local comprehensive plans direct how a local community will grow and change by articulating a series of goals, objectives, policies, actions, and standards that are intended to guide day-to-day decisions by elected officials and local government staff.

Land Use Categories: Urban Area, Natural Resource Land, and Rural Area

Under the GMA, there are three general categories of land: an Urban Area, Natural Resource Lands, and a Rural Area. Each county that is planning under the GMA must "designate an urban growth area or areas within which urban growth shall be encouraged and outside of which growth can occur only if it is not urban in nature." ¹⁶ A county's UGA must allow a range of urban densities and areas sufficient to accommodate a broad range of needs and uses, such as medical, governmental, institutional, commercial, service, retail, and other nonresidential uses, and can include greenbelt and open space areas. The area of the UGA must be sufficient to meet 20-year growth projections. The GMA directs most population and employment growth to be focused in urban areas to avoid sprawl, provide efficient and effective services and infrastructure, and protect environmentally critical areas.

Natural Resource Lands are those lands that are not already characterized by urban growth and that have long-term significance for agriculture, forestry, or mineral resource extraction. Jurisdictions must adopt regulations protecting these resource uses from conversion to other non-resource uses.¹⁷

The Rural Area includes "development outside the urban growth area and outside agricultural, forest, and mineral resource lands" and can consist of a variety of uses and residential densities at levels that are consistent with the preservation of rural character. Rural development can consist of a variety of uses and residential densities and may use techniques such as "clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural economic advancement, densities and uses that are not characterized by urban growth and that are consistent with rural character." The rural element (in King County, the Rural Areas and Natural Resource Lands chapter) of the comprehensive plan must include measures to contain development and protect against sprawl, assure visual compatibility with the surrounding rural setting, protect critical areas, and protect against conflicts with agricultural, forest, and mineral resource uses.

¹⁶ RCW 36.70A.110.

¹⁷ RCW 36.70A.060.

¹⁸ RCW 36.70A.030(24).

¹⁹ RCW 36.70A.070(5)(b).

Review and Evaluation Program

The Review and Evaluation Program requires King County to determine the amount of land suitable for urban development and evaluate the capacity for growth, based upon measurement of recent actual development activity. ²⁰ This is commonly referred to as a "buildable lands report," or, in King County, the "Urban Growth Capacity Report."

The 2021 King County Urban Growth Capacity Report was adopted via Ordinance 19369 on December 14, 2021, and ratified on April 6, 2022. Between 2006 and 2018, the County had a net gain of about 131,000 new housing units, with 4 percent of new housing construction occurring in urban unincorporated areas and 3 percent in rural unincorporated areas. Findings from the Urban Growth Capacity Report indicate that the growth capacity within urban unincorporated areas is about 7,400 housing units and 1,700 jobs, compared to about 406,000 housing units and 613,000 jobs in the urban area countywide (including both incorporated and unincorporated areas). The growth capacity in urban unincorporated areas included the capacity in unincorporated PAAs, including the Federal Way, North Highline, and Renton PAAs, which are now designated as High-Capacity Transit Communities in VISION 2050. The Urban Growth Capacity Report evaluated the performance of the existing growth targets to the year 2035, as required by GMA, and provided baseline information for the development of the 2044 growth targets, which were adopted in the 2021 CPPs and will be incorporated into the 2024 Update.

Development Regulations

The GMA requires that all development regulations be consistent with comprehensive plans. Development regulations include provisions such as building and construction standards, clearing and grading, land segregation, and zoning.

1.4 SEPA and Public Involvement

1.4.1 SEPA Scoping Process

King County determined that the 2024 Update has the potential to result in significant adverse impacts on the environment, and therefore an EIS is required by RCW 43.21C.030(2)(c). Subsequently, the County issued a Determination of Significance on August 10, 2022, to solicit comments on the scope of the EIS. ²² Agencies, Tribes, and members of the public were invited to provide comments between August 10 and August 31, 2022, on the alternatives, probable significant adverse impacts, and mitigation measures for the 2024 Update. The County received 10 comments, six from members of the public and four from organizations. These comments were summarized and included in their entirety in the King County Comprehensive Plan Scoping Summary Report. ²³

²⁰ RCW 36.70A.215.

²¹ King County, King County Urban Growth Capacity Report, June 2021. [LINK]

²² King County, State Environmental Policy Act Determination of Significance and Request for Comments on Scope of Environmental Impact Statement, August 2022. [LINK]

²³ King County, King County Comprehensive Plan Scoping Summary Report, October 2022. [LINK]

1.4.2 Purpose of the EIS

The analysis in this Draft EIS will be used to review the environmental impacts of the 2024 Update. The adoption of comprehensive plans or other long-range planning activities is classified as a nonproject action under SEPA.²⁴ A nonproject action is defined as an action that involves decisions on policies, plans, or programs. An EIS for a nonproject proposal does not require site-specific analyses; instead, it should discuss potential impacts appropriate to the scope and planning level of the nonproject proposal.²⁵ Specifically related to an EIS for a comprehensive plan, SEPA provides that the discussion of alternatives "shall be limited to a general discussion of the impacts of alternate proposals for policies contained in such plans, for land use or shoreline designations, and for implementation measures. The lead agency is not required under SEPA to examine all conceivable policies, designations, or implementation measures but should cover a range of such topics."²⁶

This Draft EIS is meant to help the public and decision-makers identify and evaluate the potential environmental effects of alternative policies, development patterns, service standards, and implementation approaches related to future growth. Additional environmental review will occur as subsequent project or nonproject actions are proposed in the county in the future; future environmental review could occur in the form of new EISs, Supplemental EISs, adoption of existing environmental documents, SEPA addenda, or determinations of nonsignificance.²⁷

1.4.3 Public Involvement

To support early and continuous engagement throughout the 2024 Update, County staff developed a multiphase public participation plan with a focus on (1) centering the voices of those who are Black, Indigenous, People of Color, immigrants, and/or refugees, and other intersectional populations, including those who earn less than 80 percent of the area median income; people with disabilities; seniors; LGBTQIA+ people; and/or those who identify as women; and (2) partnering with King County equity cabinets and community-based organizations. This public participation plan strove to meet the "County engages in dialogue" level of community engagement as outlined in the King County Office of Equity and Racial and Social Justice Community Engagement Guide, with a two-way channel of communication, multiple interactions, the advancement of solutions to complex problems, and creation of an advisory board and community partnerships.

During the scoping phase of the 2024 Update in early 2022, the County shared information about comprehensive planning and the 2024 Update and requested public input. Based on community feedback, the scope was further informed by review of recent community input from the Skyway-West Hill and North Highline subarea planning processes, as well as the community recommendations from the King County Immigrant and Refugee Commission, Mobility Equity Cabinet, Open Space Equity Cabinet, and Climate Equity Community Task Force.

Throughout the development of the Executive Public Review Draft from mid-2022 through mid-2023, the County engaged the community through a number of methods, including the creation of an Equity Work Group. The Equity Work Group, consisting of 15 community members from historically

²⁴ WAC 197-11-704.

²⁵ WAC 197-11-442.

²⁶ WAC 197-11-442(4).

²⁷ WAC 197-11-443.

²⁸ King County, Community Engagement Guide, 2011. [LINK]

underrepresented groups, worked closely with Executive staff to incorporate equity considerations into the 2024 Update. Their work included educational engagement to expand their personal knowledge base, discussion and development of key proposals, and participation in the equity impact review process. Additionally, the Equity Work Group was instrumental for shaping the community engagement methods for the 2024 Update, as well as identifying the groups that should be included in the engagement process.

The Executive also provided opportunities for the general public to stay informed and provide input via website, social media, newsletters, emails, surveys, town hall meetings, ethnic media, and partnerships with local businesses and community-based organizations at key milestones.

- After the scope was approved by the Council, the Executive implemented a large-scale awareness campaign for the general public in September and October 2022. This effort was centered around an opportunity for the general public to provide input on the three main theme areas for the 2024 Update (equity, housing, and climate change and the environment) and included use of a partnership with a community-based organization that specializes in "last-mile" outreach to populations historically underrepresented in comprehensive planning.²⁹
- During February 2023, County staff shared draft conceptual proposals with the public and offered
 a variety of ways to engage with the County about the concepts, such as an incentivized feedback
 survey and virtual town halls. One of the unique aspects of this effort was a partnership with a
 local bakery to provide incentives for those who participated in the survey and a place-based
 outreach effort conducted in partnership with the members of the Equity Work Group to meet
 people where they are.
- The third phase of engagement began after the Public Review Draft of the 2024 Update was released on June 1, 2023, for a 45-day public review and comment period. Engagement during this time included an open house at the Southgate Roller Rink in White Center; three virtual town halls; tabling at community-led events; working with ethnic media outlets and social media microinfluencers who are Black, Indigenous, and People of Color; and partnering with community centers in neighborhoods that have been historically underrepresented in the planning process.
- All efforts included the use of language access strategies, including but not limited to materials translated into six or more languages, interpretation services, and use of illustration and graphic design for key materials.

Following completion of the public comment period on the Public Review Draft, an Executive Recommended Plan informed by this public input was submitted to the Council in December 2023.

The Council review, refinement, and adoption process throughout 2024 will include additional public outreach and opportunities for public input as part of the decision-making process. This will include, at a minimum, the ability to submit written feedback throughout the process, opportunities for verbal public comment, a formal public hearing before the full Council, a 30-day notice of the public hearing date and a formal comment period, emailed notices of key milestones and opportunities for input, and a mailed notice to properties near proposed land use designation and/or zoning classification changes.

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²⁹ Historically underrepresented groups or populations are communities of people whose experiences, opinions, and life outcomes have intentionally or indirectly not been sought out or reflected in planning processes. Historically underrepresented groups often include Black, Indigenous, and other People of Color communities; immigrants; refugees; people living with low incomes; people speaking a language(s) other than English; women and gender non-conforming individuals; and LGBTQIA+ people.

1.5 Summary of Environmental Impacts Evaluated

This Draft EIS discusses the potential environmental impacts that could result from the 2024 Update. This Draft EIS recognizes that many of the policies and regulatory changes being proposed as part of the 2024 Update are aimed at improving environmental conditions, such as increasing conservation lands or reducing reliance on fossil fuels, often building on existing policies in the Current Plan. The Draft EIS considers whether the proposal will have significant adverse environmental impacts rather than considering whether those are outweighed by any beneficial aspects. Detailed evaluations of potential impacts to the natural and built environment are included in Chapter 3 and Chapter 4, respectively. No significant adverse impacts have been identified.

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2. PROPOSED ACTION AND ALTERNATIVES

2.1 Planning Context

The Current Plan is based on the guiding principles of creating sustainable neighborhoods; preserving open space and natural resource land; directing development toward existing communities; providing a variety of transportation choices; addressing health, equity, and social and environmental justice; and achieving environmental sustainability. These guiding principles are consistent with the GMA. The guiding principles help to inform and guide funding decisions, the creation and operation of programs and projects, and how the County interacts with local, state, and federal governments, Indian Tribes, the community, and other interested parties. The 2024 Update proposes to make substantive policy changes, consistent with the existing and proposed new guiding principles. These policy updates are included throughout the Comprehensive Plan elements.

2.2 Proposal Objectives

The 2024 Update includes an overarching goal of fostering a welcoming community where every person can thrive and is focused on equity, housing, and climate change and the environment in order to:

- Implement the current GMA, MPPs, and CPPs.
- Reflect, create alignment with, and advance current plans, regulations, and practices.
- Ensure consistency between the Plan and the King County Code.

Specific objectives include:

- Reducing housing and business displacement and advancing equity for those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those that earn less than 80 percent of the Area Median Income (AMI).
- Integrating a pro-equity and anti-racist policy framework that improves outcomes for those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those who earn less than 80 percent of the AMI.
- Improving health equity outcomes in communities with the greatest and most acute needs.
- Aligning housing policies and regulations with the CPPs and Washington State Engrossed Second Substitute House Bill 1220 (Chapter 254 Laws of 2021).
- Improving affordable housing supply, especially for those who are Black, Indigenous, People of Color, immigrants and/or refugees, especially those that earn less than 80 percent of the AMI.
- Expanding housing options at all levels of affordability.
- Aligning with and advancing the King County 2020 Strategic Climate Action Plan (SCAP) to reduce greenhouse gas emissions, support sustainable and resilient communities, and prepare for climate change.³⁰
- Integrating and implementing the County's Clean Water, Healthy Habitat goals.
- Increasing the amount of land that is preserved for conservation.

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³⁰ King County, 2020 SCAP as adopted in Motion 15866, 2021. [LINK]

- Implementing CPPs.
- Addressing the outcomes of the County's Subarea Planning Program.
- Updating transportation policies.
- Improving regulations governing rural and natural resources.
- Implementing land use designation and zoning classification changes.

2.3 Alternatives Considered for Analysis

SEPA requires an EIS to analyze the probable adverse environmental impacts of a range of reasonable alternatives, including a "no action" alternative.³¹ For non-project proposals, such as the 2024 Update, SEPA encourages agencies to describe the proposal in terms of alternative means of accomplishing a stated objective rather than a preferred solution.³²

Accordingly, the alternatives evaluated in this Draft EIS are intended to illustrate alternate means of implementing the current GMA, MPPs, and CPPs; reflecting, creating alignment with, and advancing current plans, regulations, and practices; and updating the Current Plan and the King County Code. When adopted, the 2024 Update may be one of the alternatives or blend components of multiple alternatives together.

Additional detail or changes to the proposal will be reflected in the Final EIS, consistent with WAC 197-11-405. The 2024 Update proposed by the Executive may be accessed on the King County website and includes changes that are the same as or similar to changes included in each of the action alternatives. The King County Council may also propose variations from the Executive Recommended Plan and the proposals included in each of the action alternatives. The range of potential impacts from the action alternatives is anticipated to cover the potential impacts from the adopted 2024 Update.

2.3.1 Features Common to All Alternatives

Three alternatives are proposed, as described below. All three of the alternatives, which include the No Action, Limited Change, and Extensive Change alternatives, would:

- Include goals and policies that address, to varying degrees, equity, housing, and climate change and the environment.
- Build on existing growth patterns.
- Allow growth that is below existing capacity within unincorporated King County. All alternatives assume the same estimated growth capacity within urban unincorporated areas, which was determined to be 7,386 housing units and 1,680 jobs, as identified in the 2021 Urban Growth Capacity Report.³³

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³¹ WAC 197-11-402(1); WAC 197-11-060(3).

³² WAC 197-11-442(2).

³³ The Urban Growth Capacity Report uses technical assumptions that constrain calculated development capacity to a specific time period (capacity through 2035) and reflect past development densities. Under existing zoning, urban unincorporated King County has capacity for 29,600 housing units and 63,000 jobs. Zoning-based capacity is a higher estimate because it is not constrained to a time period and reflects the base densities allowed under existing zoning.

While the capacity for growth is consistent among all three alternatives, the growth assumptions underlying the alternatives vary.³⁴

- The No Action Alternative carries forward the growth targets from the 2012 CPPs. These growth targets are higher than the 2021 CPP targets. The No Action Alternative anticipates about 9,000 new housing units and 6,800 new jobs within urban unincorporated King County.³⁵
- The two action alternatives use the policy and regulatory framework from the 2021 CPPs and the associated growth targets. The action alternatives anticipate 5,412 new housing units and 3,340 new jobs within urban unincorporated King County.

2.3.2 No Action Alternative

The No Action Alternative would retain the Current Plan and associated land use designations, zoning classifications, and development standards. Under this alternative, the County would not update the Current Plan or King County Code to align with the current GMA, MPPs, or CPPs that have not already been included in the Plan updates made since the last statutory update.

The Current Plan includes goals and policies aimed at addressing equity, housing, and climate change and the environment that would remain in effect. For example, the Current Plan policies support community development tools, such as food innovation districts and residential local improvement districts; commit to exploring increasing housing density and affordable housing near businesses and transit; and include Rural Area policies intended to avoid incompatible uses.

The No Action Alternative is described further in Chapter 3, Natural Environment – Affected Environment, Significant Impacts, and Mitigation Measures, and Chapter 4, Built Environment – Affected Environment, Significant Impacts, and Mitigation Measures.

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³⁴ The growth targets underlying the No Action Alternative are larger than those underlying the Action Alternatives for multiple reasons. First, the targets for urban unincorporated King County decreased between the 2012 and 2021 CPPs, driven partly by changes to the Regional Growth Strategy's assignment of more growth to cities and partly from local policy. Additionally, the 2012 urban unincorporated growth targets assume growth in the Bear Creek Urban Planned Development, but that development is now built out with limited capacity for additional growth. Finally, the 2021 growth targets were allocated to major PAAs to reflect the capacity estimated in the Urban Growth Capacity Report and to balance development pressure with these areas' role within King County and the Regional Growth Strategy.

³⁵ The growth assumptions for the No Action Alternative are based on the growth targets adopted in the 2012 King County Countywide Planning Policies. The 2006–2035 growth targets for urban unincorporated King County were extended to 2044 using the growth targets' average annual growth. Growth between 2006 and 2019 was then subtracted from this amount to create a 2019–2044 growth target consistent with the time period of the 2024 Update.

2.3.3 Action Alternative 1: Limited Change Alternative

The Limited Change Alternative consists of amendments to the Current Plan goals and policies as well as related land use designations, zoning classifications, and development standards that would meet the proposal objective through a smaller-scale approach. The Limited Change Alternative would generally:

- Implement smaller, more incremental changes over time, using essentially the same level of resources as the Current Plan and within existing regulatory authority.
- Include voluntary programs, incentives, and policies that support the proposal objectives, as opposed to mandates or requirements.
- Not expand the applicability of existing requirements, programs, incentives, or policies to new or larger geographic areas beyond where a similar framework already applies.

For example, the Limited Change Alternative would seek to achieve the proposal objectives by adopting policies that further encourage or incentivize, but not mandate, inclusionary housing.

The Limited Change Alternative is generally anticipated to facilitate more minor changes with both potential positive and adverse impacts to the environment over time. It would also include minor technical amendments and incorporate statutorily required changes. Please see Table 2.3-1, Alternatives Examples Table, for examples of 2024 Update proposals under Limited Change Alternative.

2.3.4 Action Alternative 2: Extensive Change Alternative

The Extensive Change Alternative consists of amendments to the Current Plan goals and policies, as well as related land use designations, zoning classifications, and development standards, that would meet the proposal objective through broader, more major changes. The Extensive Change Alternative would generally:

- Implement more substantial changes than the Limited Change Alternative and could require additional resources and regulatory authority.
- Include mandatory programs and requirements that advance the proposal objectives, rather than only voluntary programs, incentives, or policies.
- In some instances, expand the applicability of existing requirements, programs, incentives, and policies to new or larger geographic areas beyond where a similar framework already applies.

For example, the Extensive Change Alternative would seek to achieve the proposal objectives by expanding mandatory inclusionary housing to all unincorporated areas.

The Extensive Change Alternative is generally anticipated to have more substantial changes with both positive and adverse impacts to the environment compared to the Limited Change Alternative. It would also include minor and technical amendments and incorporate statutorily required changes. Please see Table 2.3-1, Alternatives Examples Table, for examples of 2024 Update proposals under Extensive Change Alternative.

Table 2.3-1. Alternatives Examples Table

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
Equity			
Reduce housing and business displacement and advance equity for those who are Black, Indigenous, People of	and policies, land use designations, zoning classifications, or development regulations aimed at improving equity. Full implementation of	Support public financing techniques to promote stability, prevent displacement, and promote equitable development.	Require public financing techniques that will provide an advantage for projects that promote housing stability, prevent displacement, and promote equitable development.
Color, immigrants, and/or refugees, especially those who also earn less than 80%		Increase bonuses and development capacity for inclusionary housing where already allowed.	Expand inclusionary housing or require mandatory inclusionary housing in all unincorporated areas, including Rural Towns.
of the AMI.		Stabilize economic displacement of businesses by supporting small businesses and home occupations to promote community stability and create opportunities.	Prevent economic displacement of existing businesses and promote new small businesses and home occupations to promote community stability and create opportunities.
		Make minor updates to implement the 2021 Anti-Displacement Report ³⁶ in Skyway and North Highline, such as the following: Community preference/right to return. Priority hire. Tenant relocation assistance. Community land trust. Manufactured housing preservation. Increased home ownership opportunities.	Adopt all strategies in the 2021 Anti- Displacement Report for all unincorporated areas.
		Study the impact of a creative economy.	Adopt strategies and incentives that encourage a creative economy.

³⁶ King County, Skyway-West Hill and North Highline Anti-displacement Strategies Report, September 30, 2021. [LINK]

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
Integrate a pro-equity and anti-racist policy framework	No changes to existing goals and policies, land use	Advance, with minor changes, community-driven, anti-racist, pro-equity strategies.	Implement community-driven, anti-racist, proequity strategies.
into the Comprehensive Plan that improves outcomes for	designations, zoning classifications, or	Evaluate implementation of an equitable development initiative.	Implement and fully fund an equitable development initiative.
those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those who also earn less than 80% of the AMI.	development regulations aimed at improving equity.	Support equitable economic opportunities and access for those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those who also earn less than 80% of the AMI.	Provide equitable economic opportunities and access for those who are Black, Indigenous, People of Color, immigrants, and/or refugees, especially those who also earn less than 80% of the AMI.
AIVII.		Support economic and housing equity for populations that intersect with historically underserved ³⁷ populations, including people with disabilities, seniors, people who are LGBTQIA+, and/or those who identify as women.	Provide economic and housing equity for populations that intersect with historically underserved populations, including people with disabilities, seniors, people who are LGBTQIA+, and/or those who identify as women.
		Mitigate the impacts of new development of certain kinds of uses (for example, residential, healthcare facilities, childcare facilities) on properties near major highways and freeways.	Prohibit development of certain kinds of uses (for example, residential, healthcare facilities, childcare facilities) on properties near major highways and freeway.
		Consider issues of equity, social, and environmental justice; racially and environmentally disparate health outcomes; and physical, economic, and cultural displacement when evaluating and implementing its land use policies, programs, investments, and practices.	Proactively address issues of equity, social, and environmental justice; racially and environmentally disparate health outcomes; and physical, economic, and cultural displacement when evaluating and implementing its land use policies, programs, investments, and practices.

³⁷ Historically underserved groups or populations are communities that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life. Historically underserved groups often include Black, Indigenous, and other People of Color communities; immigrants; refugees; people living with low incomes; people speaking a language(s) other than English; women and gender non-conforming individuals; and LGBTQIA+ people.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Incorporate, with minor changes, the CPP mandates for community engagement and County equitable engagement best practices.	Implement the CPP mandates for community engagement and County equitable engagement best practices.
		Advance, with minor updates, community recommendations from the King County Climate Equity Community Task Force, Immigrant and Refugee Commission, Mobility Equity Cabinet, and Open Space Equity Cabinet.	Implement community recommendations from the King County Climate Equity Community Task Force, Immigrant and Refugee Commission, Mobility Equity Cabinet, and Open Space Equity Cabinet.
		Encourage facilities that provide healthcare for people identifying as women.	Provide facilities that provide healthcare for people identifying as women.
		Encourage trauma-informed design or best practices in certain County-owned or funded facilities.	Adopt development standards that require trauma-informed design in new development.
Improve health equity outcomes in communities with the greatest and most	No changes to existing goals and policies, land use designations, zoning	Encourage culturally relevant childcare and early learning facilities and services in areas where this use is currently allowed.	Allow culturally relevant childcare and early learning facilities and services throughout all of unincorporated King County.
acute needs.	classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Encourage access to programs for youths to build life, academic, and employment skills. Address the differences that geography, access to transportation, and affordable housing have on the ability for youths not in the contiguous UGA to achieve their full potential.	Provide programs for youths to build life, academic, and employment skills so that all youths can achieve their full potential across geographies, with consideration for the differences in access to transportation and affordable housing for youths not in the contiguous UGA.
		Encourage siting of behavioral health facilities that allow for culturally relevant care and that provide a continuum of care that is accessible to the communities where residents live.	Allow siting of behavioral health facilities that allow for culturally relevant care and that provide a continuum of care that is accessible to the communities where residents live.
		Encourage siting of community centers, aquatics, and/or community services hubs.	Provide community centers, aquatics, and/or community services hubs.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Expand existing cannabis retail dispersion requirements in areas with a high percentage of youth and/or Black, Indigenous, and People of Color residents.	Prohibit new cannabis retail in all unincorporated areas.
		Encourage additional parks and open space in urban unincorporated areas, particularly in Opportunity Areas.	Require additional parks and open spaces in urban unincorporated areas, particularly in Opportunity Areas.
		Support development that reduces heat islands and heat absorption in the unincorporated Urban Area and Rural Area, with a particular emphasis on vulnerable populations by, for example, encouraging green infrastructure and/or tree retention, the use of passive cooling, and energy efficient cooling technologies in new developments.	Adopt development standards to reduce heat islands and heat absorption in the unincorporated Urban Area and Rural Area, with a particular emphasis on vulnerable populations by, for example, requiring green infrastructure and/or tree retention or the use of passive cooling and energy efficient cooling technologies in new developments.
		Encourage cooling centers to provide access for urban and rural residents, such as in cities or urban areas adjacent to the Rural Area.	Develop cooling centers to provide access for urban and rural residents, including in the Rural Area.
		Encourage strategies to create a regional network of public hygiene, sanitation, and drinking water facilities.	Create and manage a regional network of public hygiene, sanitation, and drinking water facilities
		Incentivize facilities or infrastructure that provide access to healthy foods, including at schools.	Provide facilities or infrastructure that provide access to healthy foods, including at schools.
		Make minor changes to the tree retention standards in the urban unincorporated area.	Adopt stringent tree retention standards for the unincorporated-wide, with enforcement mechanisms to prohibit most healthy tree removals.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
Housing			
Align housing policies and regulations with the CPPs and Washington ESS House Bill 1220 (Chapter 254, Laws of 2021)	No changes to existing goals and policies, land use designations, zoning classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Evaluate and advance applicable housing recommendations from the 2021 CPPs, the GMPC Affordable Housing Committee, and the Regional Affordable Housing Task Force report.	Implement the housing policies in the recommendations from the 2021 CPPs, the GMPC Affordable Housing Committee, and the Regional Affordable Housing Task Force report.
		Study impact of inflation and rising land cost on housing affordability.	Adopt strategies to reduce or eliminate the impact of inflation and rising cost of land on affordability.
		Evaluate density in Rural Towns.	Limit housing density in Rural Towns through methods such as capping the number of dwelling units constructed each year and requiring TDRs to be used above that cap; looking at the size and requiring affordable housing as part of subdivisions; or downzoning Rural Towns.
Improve affordable housing supply, especially for those who are Black, Indigenous,	No changes to existing goals and policies, land use designations, zoning	Incentivize affordable housing in subdivisions in Residential and Rural Area zones.	Require affordable housing in subdivisions in Residential and Rural Area zones.
People of Color, immigrants and/or refugees, especially those who earn less than 80% of the AMI.	classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Make minor changes to the Residential Density Incentive Program to improve incentives for development of affordable housing.	Make extensive changes to the Residential Density Incentive Program, such as density bonuses, and streamline the process to encourage more utilization of the program.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
Expand housing options at all levels of affordability.		Incentivize workforce housing (meaning housing that is affordable to and meets the housing needs of teachers, farmers, service providers, and others) for those who work in the Rural Area.	Determine the need for workforce housing by AMI level, ZIP code/geographic area, and transportation access and incentivize and require workforce housing to address these income brackets, including in the Rural Area.
	aimed at improving equity. Full implementation of existing adopted policies,	Make minor changes to the allowances for permanent and temporary farmworker housing.	Broaden existing allowances for more permanent and temporary farmworker housing.
	land use designations, zoning classifications, and development regulations.	Make minor changes to allow shelters and housing for those experiencing homelessness in urban residential and commercial zones.	Allow for a continuum of emergency shelters and supportive housing types with minimal development and operational conditions in any zone where dwelling units are allowed.
		Allow some additional high-density housing near transit and employment through minor upzones (such as R-18 and R-24 zones near transit and employment).	Require high-density housing in all areas near transit and employment (such as R-12, R-24, and R-48 zones near transit and employment) and require a higher minimum density.
		Allow for some additional types of housing and densities in low-density residential zones, with strict development conditions.	Allow for additional types of housing and densities in low-density residential zones, with minimal development conditions.
		Make minor changes to allow for larger, culturally relevant housing.	Incentivize culturally relevant housing for families that don't need multiple bedrooms.
		Make minor changes to the Vashon Affordable Housing Special District Overlay.	Replace the Vashon Affordable Housing Special District Overlay with an inclusionary housing program.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
Climate Change and the Environ	nment		
Align with and advance the King County 2020 Strategic Climate Action Plan to reduce GHG emissions, support sustainable and resilient communities, and prepare for climate change.	No changes to existing goals and policies, land use designations, zoning classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Encourage reduction in GHG emissions from government operations, such as increasing the number of zero-emission, County-owned vehicles and supporting electric vehicle infrastructure.	 Require reductions in GHG emissions from government operations and private development. Examples include, at a minimum: Expanding electric vehicle use and changing infrastructure in a geographically dispersed and equitable manner, including in the Rural Area. Requiring electric vehicle infrastructure for multiplexes at the same rate as for townhomes and require electric vehicle readiness (conduit and electrical) in multiplexes.
		Reduce climate-related health impacts.	Adopt standards aimed at eliminating climate- related health impacts.
		Address the impact of climate change on food economy, food production, APDs, and agricultural lands, with minor changes.	Make extensive changes, including programmatic and policy changes, to address the impact of climate change on food economy, food production, APDs, and agricultural lands.
		Address the impact of climate change on the County's road system.	Create a roads system that is resilient to climate change impacts.
		Support design standards that protect residents from air quality impacts during wildfire smoke events.	Adopt design standards that protect residents from air quality impacts during wildfire smoke events.
		Support the use of renewable energy.	Adopt regulations and programs that reduce energy use (through design or equipment requirements) and phase out fossil fuel use.
		Support wildfire planning, forest health improvements, post-fire response strategies, and associated landslide hazard mitigation through additional planning, collaboration with partners, and specific policies.	Prohibit new development in unincorporated wildland urban interface (WUI) fire-risk areas and adopt building standards and new regulations for to address landslide hazards associated with wildfires.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Allow additional clearing of trees and vegetation for forest fire prevention in unincorporated WUI fire-risk areas without a permit, for habitable structures and utilities. Minimize GHG emission impacts of increased densities resulting from urban unincorporated TDR receiving sites.	Allow additional clearing of trees and vegetation in unincorporated King County, without a permit, for habitable structures and utilities. Require mitigation of GHG emission impacts of increased densities resulting from urban unincorporated TDR receiving sites.
		Evaluate and address impacts of new renewable energy systems and associated infrastructure, including energy storage systems, in the unincorporated area.	Adopt standards to limit or prohibit the location and development of battery energy storage systems in the unincorporated area, especially near residences and places people congregate.
Integrate and implement the County's Clean Water, Healthy Habitat goals.	unty's Clean Water, and policies, land use	 Encourage increased fish passage and salmon habitat restoration. Encourage shoreline development that reduces reliance on shoreline stabilization for protection. Encourage the use of soft shoreline stabilization methods. Discourage new or replaced bulkheads. Adopt additional development regulations for shoreline stabilization in geologically hazardous areas. 	 Implement and accelerate fish passage and salmon habitat restoration programs. Require shoreline development to be located and designed to avoid the need for future shoreline stabilization. Restrict the replacement of hard shoreline stabilization methods for existing development. Prohibit new or replaced bulkheads. Prohibit new development that requires any shoreline stabilization in geologically hazardous areas.
		Support use of a multi-benefit and integrated floodplain management approach.	Require a multi-benefit and integrated floodplain management approach.
		Support implementation of the Fish, Farm, Flood recommendations for the Snoqualmie Valley APD.	Implement the Fish, Farm, Flood recommendations and expand the approach to other APDs in King County.
		Balance activities related to agricultural production, fish habitat restoration projects, and floodplain restoration projects in APDs.	Require habitat or floodplain restoration. projects in unincorporated areas to balance the goals of agricultural production, habitat quality, and floodplain and ecological functions.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Evaluate approaches to protect and promote both small hobby farms and larger commercial farms.	Adopt different standards to promote and protect both small hobby farms and larger commercial farms.
		Support regional collaboration on stormwater management planning.	Adopt stormwater management requirements related to regional planning.
		 Update critical areas regulations with best available science and make minor updates, such as clarifying changes, using updated terminology, and reflecting changes in state law. Make minor changes based on recommendations from alluvial fan demonstration project. Study uniform critical areas setbacks for similar permitted uses in Agriculture, Residential, and Rural Area zones, based on best available science. 	 Update critical areas and shoreline regulations with best available science and make substantive updates, such as reviewing riparian, aquatic, and/or alluvial fan regulations; stream, wetland, and/or Critical Aquifer Recharge Area mapping; climate change considerations; species and habitats of local importance; and other applicable areas to reflect state guidance. Adopt code changes to implement recommendations of alluvial fan demonstration project. Impose uniform critical area setbacks for similar permitted uses in Agriculture, Residential, and Rural Area zones, based on best available science.
		Support management of beaver dams.	Allow management of beaver dams without a clearing and grading permit.
Increase the amount of land that is preserved for conservation.	No changes to existing goals and policies, land use designations, zoning classifications, or development regulations aimed at improving equity.	Make minor procedural modifications to the Four-to-One program, such as changing the application progress and requiring tri-party agreements with the project proponent and the adjacent city.	 Make substantive updates to the Four-to-One program requirements, such as: Using joint planning area boundaries. Allowing for reduced open space ratio. Allowing for noncontiguous open space. Allowing urban-serving facilities in the Rural Area. Allowing nonresidential projects. Allowing projects not likely to be timely annexed.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
	Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Make minor procedural modifications to the TDR program, such as clarifying study requirements when using TDRs in formal subdivisions, clarifying TDR sending site calculations, allowing for deed restrictions in addition to conservation easements on TDR sending sites, allowing for the TDR bank to sell partial TDR increments, requiring the County to maintain a supply of TDR credits, and removing a requirement for a down payment for TDRs.	Modify and expand the TDR program, such as providing bonus TDRs for sending sites that are in the Forest zone or are vacant marine shoreline without bulkheads, allowing TDR sending sites on Vashon-Maury Island, allowing urban open spaces that were previously acquired using conservation futures tax funding or urban separators to become TDR sending sites, removing specific goals for reduction of development potential outside the Urban Area, allowing TDRs to be used for duplex units in the Urban Area and Rural Towns, and allowing for payment into the TDR bank when TDRs are not available.
		Support retention of future old growth corridors, including landowner incentives and land conservation tools such as TDRs, conservation easements, and acquisition.	Implement creation and retention of future old growth corridors, such as through reducing density or intensity of uses or prohibit development in those areas.
General			
Implement 2021 CPPs	No changes to existing goals and policies, land use designations, zoning	Implement, with minor changes, state law changes made since the 2012 GMA-required review and update.	Implement state law changes made since the 2012 GMA-required review and update.
	classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Include the housing and job growth targets adopted in the CPPs.	Include different housing and job growth targets than in the CPPs.
		Nominate two new Countywide centers for Skyway and White Center, with minor changes.	Nominate two new Countywide centers, for Skyway and White Center, with extensive changes to encourage full implementation.
		Allow UGA exchanges authorized by RCW 36.70A.130, but with more limitations than in state law.	Allow UGA exchanges as authorized by RCW 36.70A.130 and allow for exchanges including lands that are encumbered by critical areas.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Encourage cities to consider the impact of large developments on the surrounding Rural Area and Natural Resource Lands, including on housing affordability, roads, and infrastructure.	Require cities to pay impact fees and implement traffic demand management strategies for large developments that impact unincorporated areas.
		Encourage regional coordination to maintain rural and regional infrastructure that remains in the unincorporated area after annexation.	Require cities to contribute to maintaining rural and regional infrastructure that remains in the unincorporated area after annexation.
		Address the varying needs for accessing human services across the urban and rural geography of the county.	Provide human services across the urban and rural geography of the County. Provide metrics to measure performance to ensure the services are geographically and equitably distributed.
Address the outcomes of the County Subarea Planning Program.	No changes to existing goals and policies, land use designations, zoning classifications, or	Implement the subarea planning program by adopting area-wide policies and regulations that were priorities of communities during subarea plan development.	Implement the subarea planning program by modifying land use designations and/or zoning classifications to allow for additional density or intensity of uses in urban unincorporated areas.
	development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Make minor updates to the existing P-suffix conditions and special district overlays on Vashon-Maury Island, such as removing conditions that are in conflict or redundant to current regulations and updating to current terminology.	Make substantive updates to the existing P-suffix conditions and special district overlays on Vashon-Maury Island, such as updating the allowed uses in the Vashon Community Business and Industrial zone P-suffixes, updating standards for the Town Gateway and Town Core P-suffixes, and removing conditions that are more restrictive than the underlying code.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Make minor updates to the existing land use designations and zoning classifications in the Snoqualmie Valley/NE King County subarea, such as removing conditions that are in conflict or redundant to current regulations, repealing conditions for properties that have since been annexed, and updating to current terminology.	 Make substantive updates to the existing land use designations and zoning classifications in the Snoqualmie Valley/NE King County subarea, such as updating the allowed uses in the Fall City Business District Special District Overlay and removing some conditions to create parity with adjacent properties. For example: Add new P-suffix conditions and special district overlays or zoning classifications, including allowing microhousing or workforce housing in the Fall City and Snoqualmie Pass Rural Towns, allowing for middle housing, and adopting design standards for residential development in Fall City Rural Town. Provide social/human services to allow resident access to local care in areas where it is needed and closer to where people live and work. Incentivize agritourism, including options for compatible uses (education, experiences, value-add, processing, sales). Address food access and food justice for the subarea.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
Update transportation policies.	No changes to existing goals and policies, land use designations, zoning classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and development regulations.	Address equity in transportation options, access, and basic involvement in communication for historically underrepresented and historically underserved populations in each area. This includes defining action around access, opportunity, and involvement for these groups.	Ensure equity in transportation options, access, and basic involvement in communication for historically underrepresented and historically underserved populations in each area. This includes defining and implementing action around access, opportunity, and involvement for these groups.
		Support mobility equity for populations that intersect with historically underserved populations, including people with disabilities, seniors, people who are LGBTQIA+, and/or those who identify as women.	Ensure mobility equity for populations that intersect with historically underserved populations, including people with disabilities, seniors, people who are LGBTQIA+, and/or those who identify as women.
		Reduce use of cars, especially SOV use.	Reduce the cycle of car dependency.
		Study the feasibility of multimodal level of service in the Urban Area and Rural Area and on Natural Resource Lands.	Adopt and implement a multimodal level of service in the Urban Area and Rural Area and on Natural Resource Lands.
		Include trails as a component of active transportation. Define active transportation as walking, biking, and rolling (such as using wheelchairs, scooters), including electric-powered aides.	Incorporate regional trails as an integral part of the County's transportation system. Ensure trails, especially Eastrail, are open at night so commuters and others who travel at irregular hours can safely and legally use them.
		Address safe, reliable, and equitable transportation access, including to transit, for rural unincorporated areas, with connectivity to the Urban Area and within the Rural Area.	Provide safe, reliable, and equitable transportation access, including to transit, for rural unincorporated areas, with connectivity to the Urban Area and within the Rural Area. Address inherent issues in the GMA concerning the urban/rural divide and resulting fewer options for rural and natural resource area roads
		Support increased public transportation and non-SOV access to the preserved open space and noncontiguous UGA cities.	Increase public transportation and non-SOV access to the preserved open space and noncontiguous UGA cities.

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative	
		Encourage Vision Zero, Safe System Approach, complete street infrastructure, lowering vehicle speeds, and prioritizing safety for active transportation users.	Adopt Vision Zero, Safe System Approach, adopting complete street standards, lowering vehicle speeds, and prioritizing safety for active transportation users.	
		Encourage investments to increase safe access to public transit.	Require investments to increase safe access to public transit.	
		Increase access to fixed-route transit for people with disabilities, such as through sidewalk improvements and improved bus stops.	Ensure access to transit and affordable housing opportunities close to high-capacity transit, for people with disabilities.	
Improve regulations governing rural and natural resources.	No changes to existing goals and policies, land use designations, zoning classifications, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and regulations.	Clarify existing SEPA exemptions.	Expand SEPA exemptions to the maximum allowed by WAC 197-11-800.	
		Further encourage active production of farmland in Agriculture zones.	Incentivize or require active production of farmland in the Agriculture zones.	
		Address additional economic opportunities for farmers and for farmland, the APDs, and Farmland Preservation Properties.	Create additional economic opportunities for farmers and for farmland, the APDs, and Farmland Preservation Properties.	
		Make minor changes to the agriculture code by updating definitions and correcting inconsistencies.	Make substantive changes to the agriculture code based on a study to analyze the effectiveness of the 2017 code changes of implementing agricultural-related policies.	
Implement land use designation and zoning classification changes.	No changes to existing goals and policies, land use designations, zoning, or development regulations aimed at improving equity. Full implementation of existing adopted policies, land use designations, zoning classifications, and regulations.	Encourage art and community space to honor Tribal cultural and historic resources in new development and government projects.	Require art and community spaces to honor Tribal cultural and historic resources in new development and government projects.	
		Modify regulations for resorts in forest, rural, urban reserve, and regional business zones, with minor changes to the existing permitted use.	Allow resorts in additional areas with limited development conditions, beyond the existing permitted use.	
		Make minor changes to limit the impacts of material processing uses in areas where currently allowed.	Allow for additional material processing uses in additional zones, with limited development conditions.	

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative	
		Make minor changes to manufacturing and regional land use uses allowed in the Industrial zone and maintain existing restrictions on uses requiring a conditional or special use permit.	Make more extensive changes to manufacturing and regional land uses allowed in the Industrial zone and remove the prohibition outside the UGA or revise the uses that require a conditional or special use permit.	
		Make minor changes to development standards in anticipation of new and innovative industrial uses.	Make more extensive changes to development standards in anticipation of new and innovative industrial uses.	
		Make minor changes to allow some additional rural economic development, rural economic strategies, and tourism in the Rural Area and on Natural Resource Lands.	 Encourage rural economic development, rural economic strategies, and tourism in the rural area and on Natural Resource Lands. Encourage agrotourism in the Rural Area, especially where there is the opportunity for compatible uses, such as educational experiences, value-added processing, and sales. Modify the uses permitted in the Rural Area to implement rural economic development goals. 	
		Address regional economic development strategies for different geographies, including in the UGA and the Rural Area.	Implement regional economic development strategies for different geographies, including in the UGA and the Rural Area.	
		Encourage broadband connectivity for those in the Rural Area as an economic development strategy.	Require or provide broadband connectivity for those in the Rural Area as an economic development strategy.	
		Make minor changes to limit the impacts of mineral resource extraction operations.	Allow mineral extraction operations with fewer development conditions.	

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative	
		Reduce the allowed densities of mixed-use developments in commercial and office zone properties in the Rural Area, outside of Rural Towns. Consider how mixed-use developments, at an appropriate size and scale, could support rural economic and agritourism opportunities, the number of mixed use developments needed, and what uses would be allowed.	Prohibit mixed-use developments in commercial and office zones properties in the Rural Area.	
		Update regulations for new Urban Planned Developments and Fully Contained Communities.	Prohibit new Urban Planned Developments and Fully Contained Communities.	
		Allow for food stores in the Rural Area zone in limited circumstances.	Allow food stores in the Rural Area zone with minimal development conditions.	
		Evaluate approaches to address needs for large culturally appropriate cemeteries.	Modify land use designations, zoning classifications, and development regulations for siting a 20- to 40-acre, culturally appropriate cemetery.	
		Study design standards that implement appropriate size and scale standards in the Rural Area.	Adopt design standards that implement appropriate size and scale standards in the Rural Area.	
		Make minor land use designation and zoning classification changes based on area-wide evaluation of the UGA and permitted densities, such as modifying existing P-suffix conditions or making changes for consistency.	Make more extensive land use designations and zoning classification changes based on areawide evaluation of the UGA and permitted densities, such as moving the UGA boundary and/or increasing the density and intensity of use.	
		Evaluate lot standards.	Make substantive changes to lot standards.	
		Make minor changes to encourage compatibility of new subdivisions in the Rural Area with the surrounding neighborhood.	Adopt site design standards in the Rural Area that minimize the impact of new subdivisions on the surrounding neighborhood, Natural Resource Lands, and the environment.	

Table 2.3-1. Alternatives Examples Table (continued)

Proposal Objectives	No Action Alternative	Limited Change Alternative	Extensive Change Alternative
		Allow for additional industrial zoning classification in the Rural Area and on Natural Resource Lands where there are existing and historical intensive uses, such as solid waste or other similar governmental uses, materials processing, and mineral extraction or reclamation.	Allow for additional industrial zoning classification in the Rural Area and on Natural Resource Lands.
		Make minor changes to facilitate the conversion of mineral extraction sites that have been reclaimed, or are in the reclamation process, as green energy facilities on sites where infrastructure that produces renewable energy already exists.	Adopt policies and standards to incentivize conversion of mineral extraction sites that have been reclaimed, or are in the reclamation process, as green energy facilities and associated uses, including on-site energy generation from renewable sources, electric and alternative fuel vehicle manufacturing, indoor agriculture, battery storage and recycling, information technology uses, distribution and manufacturing facilities using green energy, and other similar uses.

3. NATURAL ENVIRONMENT – EXISTING POLICY AND REGULATORY FRAMEWORK, AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES

As required by SEPA (WAC 197-11-440), this chapter summarizes the existing policy and regulatory framework and affected environment. It also describes the environmental consequences and mitigation measures related to the following elements of the natural environment: Air Quality and Greenhouse Gas Emissions; Water Resources; Wildlife and Habitat; and Natural Resources. The discussion of each of the four elements is divided further into subsections, outlined below.

• Existing Policy and Regulatory Framework:

This subsection identifies and briefly summarizes the relevant federal, state, and local guidance documents including laws, plans, policies, rules, and regulations for the elements of the environment.

Affected Environment:

This subsection introduces the study area for the elements of the environment and briefly summarizes the existing environmental setting, physical conditions, and current trends that would be affected by the alternatives. For most elements of the environment, the study area consists of unincorporated King County, which is the area governed by the Comprehensive Plan. Except where otherwise noted, maps and figures show relevant information only within the study area for each element of the environment.³⁸

Environmental Consequences:

This subsection describes the analysis of potential impacts of the alternatives on the affected environment for the 20-year planning period. Impacts associated with the No Action Alternative are discussed first. These are impacts that would occur if King County continued to operate according to the Current Plan. Next, impacts common to both action alternatives—the Limited Change Alternative and the Extensive Change Alternative—are discussed together, followed by a comparison of impacts between the two action alternatives.

Avoidance, Minimization, and Mitigation Measures:

If potential significant adverse impacts are identified, this subsection would identify appropriate mitigation measures to avoid, minimize, or mitigate environmental impacts beyond those included as features of the action alternatives. Mitigation measures (inclusive of avoidance and minimization) are designed to offset the impacts of the action alternatives on the affected environment for each discipline.

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³⁸ The information included on the maps in this chapter has been compiled by King County staff from a variety of sources and are subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on these maps. Any sale of these maps or information on these maps is prohibited except by written permission of King County.

3.1 Air Quality and Greenhouse Gas Emissions

This section discusses air quality and greenhouse gas emissions in King County and evaluates potential impacts that may be associated with the 2024 Update alternatives.

3.1.1 Existing Policy and Regulatory Framework

Some of the primary laws, regulations, and policies guiding air quality in King County include the following:

- Clean Air Act, 42 United States Code (USC) 85, which defines the U.S. Environmental Protection Agency (EPA) responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer and establishes the National Ambient Air Quality Standards (NAAQS).
- Washington Clean Air Act, Chapter 70.94 RCW, which is intended to preserve, protect, and enhance air quality and establishes county- and multicounty-level air pollution control authorities.
- Chapter 173-476 WAC, Ambient Air Quality Standards, which establishes Washington state limits for the atmospheric concentration of the six criteria pollutants listed in the NAAQS.
- Washington Climate Commitment Act, Engrossed Second Substitute Senate Bill 5126 (Chapter 316, Laws of 2021), caps and reduces greenhouse gas emissions from Washington's largest emitting sources and industries, allowing businesses to find the most efficient path to lower carbon emissions to help Washington achieve its commitment to reducing greenhouse gas emissions by 95 percent by 2050.
- Washington Healthy Environment for All Act, Chapter 70A.02 RCW, which is intended to reduce
 environmental and health disparities in Washington state and prioritize vulnerable populations and
 overburdened communities by integrating environmental justice into several state agency activities
 including strategic plans, community engagement plans, and decision processes for budget
 development, expenditures, and granting or withholding benefits.
- Chapter 70A.533 RCW, Washington Clean Fuels Standard, designed to decrease the carbon intensity
 of Washington's transportation fuels by increasing the range of low-carbon and renewable
 alternatives that reduce dependency on petroleum and improve air quality.
- Chapter 173-423 WAC, Washington Clean Vehicles Program, adopts California emissions standards, including the zero-emission vehicle program, aimed at reducing vehicle emissions and increasing the percentage of zero-emission vehicles sold in Washington beginning with model year 2026 and achieving 100 percent new sales consisting of zero-emission vehicles by 2035.
- Puget Sound Clean Air Agency (PSCAA) Regulations, which control the emission of air contaminants from all sources within King, Kitsap, Pierce, and Snohomish Counties, and implement the requirements of the federal Clean Air Act and Washington Clean Air Act.
- 2021 King County CPPs, which include countywide reduction targets for greenhouse gas emissions and other related policies.
- 2020 King County SCAP, which outlines the County's priorities and commitments for climate action over a 5-year horizon.

3.1.2 Affected Environment

This section discusses air quality and greenhouse gas emissions in King County as a whole because air quality within unincorporated King County can affect, and be affected by, emissions throughout the county and beyond. For example, motor vehicle emissions from within the incorporated cities in western King County contribute to the air quality in neighboring unincorporated areas of the county, while a wildfire in unincorporated King County has the potential to affect air quality in neighboring counties, the region, and beyond. Air quality data and greenhouse gas emissions are typically evaluated and discussed at the PSCAA regional or broader levels. When possible, data is reported specific to King County and distinctions are made between effects to urbanized, densely populated areas and rural and undeveloped areas.

As part of the Clean Air Act, the EPA regulates six common air pollutants — known as criteria air pollutants — under the NAAQS. These pollutants include lead, ground-level ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter. Common sources and effects of these six criteria air pollutants are listed in Table 3.1-1, Criteria Air Pollutant Sources and Effects, below.

Table 3.1-1. Criteria Air Pollutant Sources and Effects

Criteria Air Pollutant	Common Sources	Common Effects
Lead	Ore/metal processing plants, piston- engine aircraft, waste incinerators, and utilities	Health: neurological effects in children and other serious health effects in adults, depending on exposure Environment: decreased growth and reproduction in plants and animals
Ground-Level Ozone ^a	Formed from the reaction of sunlight with chemicals from vehicle emissions, paints, and solvents such as nitrogen dioxide and volatile organic compounds	Health: respiratory problems, including increasing asthma symptoms Environment: harmful to sensitive vegetation and ecosystems
Carbon Monoxide	Fossil-fuel burning, including vehicle exhaust and other machinery	Health: dizziness, unconsciousness, and death when concentrations are high and is particularly bad for people with heart conditions
Nitrogen Dioxide	Fossil-fuel burning, including vehicle exhaust, power plants, and off-road equipment	Health: damage to the human respiratory tract and increase a person's vulnerability to, and the severity of, respiratory infections and asthma
Sulfur Dioxide	Fossil-fuel burning, including power plants, refineries, and other industrial facilities	Health: respiratory problems, including increasing asthma symptoms Environment: primary component in acid rain
Particulate Matter ^b	Emitted directly from sources such as vehicle exhaust, woodstoves, and wildfires, or formed from reactions of chemicals in the air, such as sulfur dioxide and nitrogen dioxide	Health: PM-2.5 poses the greatest risk to health because it can be inhaled deep into the lungs, causing severe and chronic respiratory and cardiovascular problems Environment: PM-2.5 and PM-10 cause regional haze that can reduce visibility

Sources: U.S. Environmental Protection Agency, Criteria Air Pollutants, 2022 [LINK]; Washington State Department of Health, Outdoor Air Pollution and Health Impacts, 2022. [LINK]

^a Different than upper atmosphere ozone, which helps prevent the earth from the sun's ultraviolet (UV) rays.

b Includes particles less than 2.5 microns in diameter (PM-2.5) and particles less than 10 microns in diameter (PM-10).

Unless state or local jurisdictions have adopted equal or more stringent air quality standards, the EPA standard applies. If the air quality in a geographic area is equal to or better than the standard, the area is considered "in attainment." When an area in nonattainment returns to meeting the standard, the area is reclassified as in attainment, though it must begin a 20-year maintenance period for that standard.

The Clean Air Act also requires the EPA to regulate emissions for hazardous air pollutants, or air toxics, which are pollutants known or suspected to cause cancer or other serious health effects. Most air toxics originate from human-made sources, including both mobile sources (e.g., vehicle exhaust) and stationary sources (e.g., powerplants and refineries); however, the increasing frequency and severity of wildfire activity across the western U.S. is playing an increasing role in the generation of air toxics such as fine particulate matter (PM-2.5). The EPA has identified 188 air toxics since 1990, including asbestos, benzene, formaldehyde, and many others. Air toxic emissions are regulated individually based on risk assessments and other factors, though the EPA is currently in the process of updating its strategy for addressing air toxics.

In the Puget Sound region, the PSCAA is responsible for monitoring air pollution (including criteria air pollutants and hazardous air toxics), adopting federal and state air quality mandates, and enforcing air quality regulations. In partnership with the Washington State Department of Ecology (Ecology), the PSCAA monitors air quality using six PSCAA monitoring stations and five Ecology monitoring stations in King County.

3.1.2.1 Air Quality

King County is currently in attainment for all the NAAQS. However, portions of the county, particularly in the western portion of King County within the contiguous Urban Area, were in nonattainment for ozone, carbon monoxide, and particulate matter in the past. The County completed its 20-year maintenance periods for ozone and carbon monoxide in 2016 and particulate matter in 2021. Levels of lead, carbon monoxide, nitrogen dioxide, and sulfur dioxide in King County have been consistently below federal air quality standards, while ozone and particulate matter concentrations remain a potential concern with emissions from wildfire activity stagnating and beginning to reverse decades of improvement in ambient air quality concentrations of particulate matter.

According to the PSCAA Air Quality Data Summary for 2022, air quality in King County was reported as "good" 70 percent of the year (256 days) and "moderate" 24 percent of the year (88 days). The remaining categories combined – "unhealthy for sensitive groups," "unhealthy," and "very unhealthy" – made up 6 percent of the year (21 days). There were no days in the "hazardous" air quality category.⁴³

According to the PSCAA, many of the measured air toxics have decreased significantly from 2000 to 2021; however, diesel particulate matter and wood smoke particulate pose the greatest potential health risk in the Puget Sound area. Diesel particulate matter is emitted by diesel vehicles, and concentrations are generally higher closer to large transportation corridors such interstate and state highways. Though diesel emissions have been declining over the past two decades and newer diesel emission standards

³⁹ U.S. Environmental Protection Agency (EPA), Hazardous Air Pollutants, 2023. [LINK]

⁴⁰ U.S. EPA, Washington Nonattainment/Maintenance Status for Each County by Year for All Criteria Air Pollutants, 2022. [LINK]

⁴¹ Washington State Department of Ecology (Ecology), Plans for Maintaining Air Quality, 2023. [LINK]

⁴² Burke, M. et al., "The contribution of wildfire to PM2.5 trends in the USA," *Nature*, 2023. [LINK]

⁴³ Puget Sound Clean Air Agency (PSCAA), Air Quality Data Summary for 2022. [LINK]

have been in effect since 2007, diesel exhaust still represents a major potential cancer risk from air pollution in the Puget Sound area.⁴⁴

The frequency and severity of wildfires in the Pacific northwest has increased over the last several years, causing concerns over the health effects of fine particulate matter. As shown in Figure 3.1-1, Daily PM-2.5 Levels for King County, maximum daily PM-2.5 concentrations decreased at all King County monitoring sites between 2001 and 2016; however, in 2016 the trend reversed, and there were several instances of PM-2.5 concentrations above the federal air quality standard of 35 micrograms per cubic meter ($\mu g/m^3$) since. When wildfire-impacted days are removed from the daily concentrations, the downward trend continues and levels remain below federal standards as shown in Figure 3.1-2, Daily PM-2.5 Levels for King County (wildfire-impacted days removed).

PSCAA has established a health goal of $25 \,\mu g/m^3$ for PM-2.5 as studies have shown that there can still be significant health effects below the federal standard. ⁴⁵ In 2022, air monitoring sites in King County reported up to 15 wildfire-impacted days above the 25 $\,\mu g/m^3$ goal. ⁴⁶

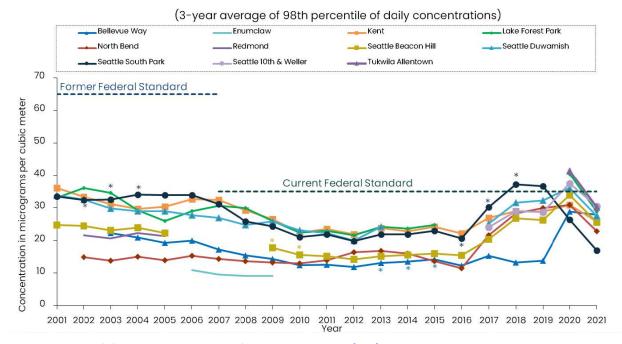


Figure 3.1-1. Daily PM-2.5 Levels for King County

Source: Puget Sound Clean Air Agency, 2021 Air Quality Data Summary, 2022. [LINK] Note: Asterisk indicates an estimate based on incomplete data.

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⁴⁴ Ibid.

⁴⁵ Berman, J. D. et al., "Health-Related Benefits of Attaining the Daily and Annual PM2. 5 Air Quality Standards and Stricter Alternative Standards," *American Journal of Respiratory and Critical Care Medicine* 185:A2317, 2012. [LINK]

⁴⁶ PSCAA, Air Quality Data Summary for 2022. [LINK]

(3-year average of 98th percentile of wildfire-excluded daily concentrations) Bellevue Way - Fnumclaw ___Kent Lake Forest Park North Rend Redmond Seattle Beacon Hill Seattle Duwamish Seattle South Park Seattle 10th & Weller __Tukwila Allentown 70 Former Federal Standard Concentration in micrograms per cubic meter 60 50 40 Current Federal Standard 30 20 10 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 3.1-2. Daily PM-2.5 Levels for King County (wildfire-impacted days removed)

Source: Puget Sound Clean Air Agency (PSCAA), 2021 Air Quality Data Summary, 2021. [LINK] Note: Asterisk indicates an estimate based on incomplete data.

3.1.2.2 Greenhouse Gas Emissions

Greenhouse gases are chemical compounds released into the air that trap heat in the atmosphere, causing an overall warming of the planet. As the planet's atmospheric temperature rises, it affects the overall climate, leading to shifts in snow and rainfall patterns and more extreme climate events such as heatwaves, droughts, and floods. King County has adopted the SCAP to provide a blueprint for addressing climate change, including reducing countywide greenhouse gas emissions. The 2021 CPPs adopted greenhouse gas reduction targets of 50 percent reduction by 2030, 75 percent reduction by 2040, and 95 percent reduction by 2050 compared to 2007 baseline levels (which was approximately 24 metric tons of carbon dioxide equivalent).⁴⁷

In 2022, King County published a community-wide geographic greenhouse gas emissions report as part of the Puget Sound Regional Emissions Analysis Project.⁴⁸ The report provides an update of trends and progress toward the County's greenhouse gas emission reduction goals, an analysis of contributing factors that led to changes in emissions, and an analysis of potential future trends based on emission reduction actions and policies.

Greenhouse gas emissions in 2019 increased by approximately 3 percent as compared to 2017 and by approximately 10 percent since 2008. However, per capita greenhouse gas emissions declined by 7 percent during this same period. In general, the largest sources of greenhouse gas emissions in King County are from the built environment, including building electricity (25 percent) and natural gas (15 percent), and

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⁴⁷ King County, 2021 King County CPPs, as amended, 2021. [LINK]

⁴⁸ Cascadia Consulting Group, King County Communitywide Geographic Greenhouse Gas Emissions, Puget Sound Regional Emissions Analysis Final Report, 2022. [LINK]

from transportation, including on-road vehicles (25 percent) and aviation (15 percent).⁴⁹ See Figure 3.1-3, Total Greenhouse Gas Emission Trends by Sector, below.

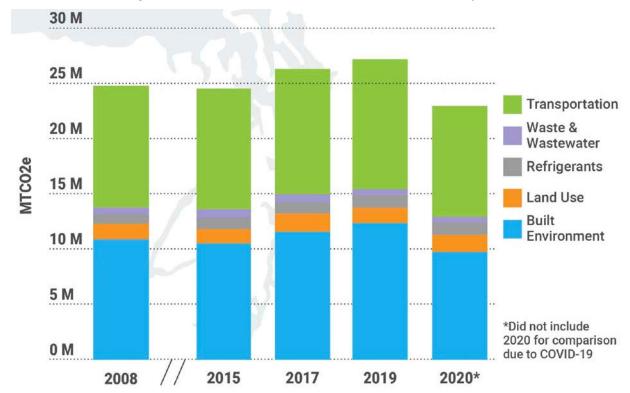


Figure 3.1-3. Total Greenhouse Gas Emission Trends by Sector

Source: Cascadia Consulting Group, King County Communitywide Geographic Greenhouse Gas Emissions, Puget Sound Regional Emissions Analysis, 2022. [LINK]

According to the 2022 report, there was a greater increase in greenhouse gas emissions between 2015 and 2019 than between 2008 and 2019. The top contributors to this increase in greenhouse gas emissions were driven by population and employment growth, fossil-fuel based electricity, local economy expansion, and increased air travel. Though they don't outweigh emissions increases, reductions in emissions between 2015 and 2019 were driven by improved vehicle efficiency, decreased commercial energy use (per job), decreased residential energy use (per home), and decreased waste generation (per capita).⁵⁰

3.1.3 Environmental Consequences

3.1.3.1 No Action Alternative

Under the No Action Alternative, air quality and greenhouse gas emissions trends would generally continue as described in the Affected Environment section.

⁴⁹ Ibid.

⁵⁰ Ibid.

Air Quality

As described previously, King County is designated as in attainment for all criteria air pollutants regulated by the federal Clean Air Act. Generally, air pollution levels have been steadily declining since the early 2000s, even with increased population growth in King County. Concentrations of lead, carbon monoxide, nitrogen dioxide, and sulfur dioxide have consistently been below federal standards, and this trend is expected to continue under the No Action Alternative. However, ozone and particulate matter (PM-2.5) are likely to remain challenges to air quality in the Puget Sound region, primarily due to onroad transportation and smoke from residential wood burning and wildfires.

Population and job growth under the No Action Alternative would result in additional impacts to air quality from increased development and transportation activity. Construction associated with development would generate vehicle exhaust from construction equipment, trucks, and worker vehicles and fugitive dust from demolition, grading, and other construction activities. Transportation-related emissions would increase along with population and job growth, as would emissions from greater fossilfuel based energy use in homes, businesses, and commercial and industrial buildings. The additional development and increase in vehicle miles travelled would result in greater concentrations of ozone and particulate matter, including diesel particulate matter, in the air.

Wildfire smoke is a recurring seasonal air quality hazard in the Puget Sound region, and the number of days with unhealthy air quality levels due to wildfire smoke will likely continue to increase as climate change exacerbates wildfire seasons in the Pacific Northwest and beyond.

Greenhouse Gas Emissions

According to the 2022 Comprehensive Plan Performance Measures Report, per capita greenhouse gas emissions have declined in King County. However, due to overall population growth and commercial development, the County did not meet its greenhouse gas reduction goal of a 25 percent reduction of countywide emissions by 2020, which was the pre-2020 goal evaluated in the report.⁵¹

As part of the Puget Sound Regional Analysis Project, King County modeled its future greenhouse gas emissions based on two scenarios: a "no action future scenario," which assumes an increase in emissions correlated with population and job growth (no federal, state, or regional emissions reductions policies or actions), and a "federal, state, and regional policies scenario," which assumes implementation of existing climate, energy, and transportation policies at multiple levels that would require or incentivize greenhouse gas emissions reductions. Both scenarios capture the potential greenhouse gas impacts related to the No Action Alternative, which would implement existing policies but not adopt new ones.

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⁵¹ King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

Table 3.1-2, Greenhouse Gas Emissions Estimates, presents estimates under both scenarios for unincorporated King County and King County as a whole.

Table 3.1-2. Greenhouse Gas Emissions Estimates

	Baseline Levels			No Action Future Scenario		,
Jurisdiction	2007	2019	2050	Change Compared to Baseline (2007)	2050	Change Compared to Baseline (2007)
Unincorporated King County	2,461,129	1,713,790	2,019,653	-18%	335,668	-86%
King County Total	22,534,611	26,983,273	37,752,459	+68%	12,108,195	-46%

Source: Cascadia Consulting Group, King County Communitywide Geographic Greenhouse Gas Emissions, Puget Sound Regional Emissions Analysis, 2022. [LINK]

Figure 3.1-4, King County Past and Projected Greenhouse Gas Emissions, displays the federal, state, and regional policies scenario described above in relation to the emissions reduction targets. Under the No Action Alternative for either greenhouse gas emission reduction scenario, King County would not meet its greenhouse gas emission reduction targets for a 50 percent reduction by 2030, a 75 percent reduction by 2040, and a 95 percent reduction by 2050 as compared to 2007 baseline levels. Failure of the County to meet its reduction targets has the potential to slow existing progress being made in reducing greenhouse gas emissions, which could continue to exacerbate the adverse effects of climate change.

30,000,000 Tree loss Agriculture ■ Refrigerants 25,000,000 Wastewater process emissions Compost 20,000,000 Landfill Marine & rail Aviation 15,000,000 Off-road equipment On-road vehicles 10,000,000 Industrial processes Propane Fuel oil 5,000,000 ■ Natural Gas ■ Electricity - Target

Figure 3.1-4. King County Past and Projected Greenhouse Gas Emissions

Source: Cascadia Consulting Group, King County Communitywide Geographic Greenhouse Gas Emissions: Geographic Greenhouse Gas Wedge Planning Tool, 2022. [LINK]

3.1.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

The action alternatives being considered for the 2024 Update would generally result in beneficial effects to air quality and reduction of greenhouse gas emissions. While new development could lead to greater pollutant and greenhouse gas emissions through land use changes and increased energy and fuel use, the action alternatives would likely accelerate trends of improved air quality and lower per-capita emissions of greenhouse gases.

The action alternative proposals that would affect air quality include those that allow for greater density of residential development, promote transit use, preserve or increase tree cover and open space, promote or require reduction in greenhouse gas emissions, promote the use of electric vehicles and renewable energy, manage wildfire risk, and preserve or promote the active use of farmland.

Proposals that dissuade or restrict development near major freeways and highways would not reduce the levels of emissions coming from traffic on those roadways but would reduce the population exposed to higher concentrations of emissions, including diesel particulate matter. The action alternatives are not anticipated to result in significant adverse impacts to air quality and greenhouse gas emissions.

Air Quality

Both action alternatives would result in changes to the location, type, and character of development in unincorporated King County, which would result in an increase in emissions, particularly ozone and particulate matter, as described for the No Action Alternative. However, growth under the action alternatives would result in denser development in areas that are closer to transit opportunities. More efficient growth patterns, combined with proposals to promote the use of public transit, electric vehicles, and renewable energy, would result in less of an increase in emissions than under the No Action Alternative.

Particulate matter emissions would still be a concern under both action alternatives, similar to the No Action Alternative. While the action alternatives include measures to manage the risk of wildfire in King County, air quality would continue to be negatively impacted by wildfire smoke from both within and beyond the county. In addition, proposals that promote the preservation and active use of farmland could result in localized air quality impacts within areas zoned for agriculture, particularly within Agricultural Production Districts (APDs), from dust, odors, and vehicle exhaust generated by farming activities, in addition to smoke from agricultural burning.

Greenhouse Gas Emissions

As shown in Figure 3.1-4, King County Past and Projected Greenhouse Gas Emissions, King County will not meet its greenhouse gas emission reduction targets without implementing additional actions to reduce greenhouse gas emissions beyond existing climate, energy, and transportation regulations. The action alternatives would help King County meet its greenhouse gas emission reduction targets through proposals that go beyond existing policies and regulations, particularly in the energy and transportation sectors. These proposals include those that would promote the use of renewable energy and electric vehicles, as well as preserve open space and increase tree cover. It is important to note that the proposals enacted through the 2024 Update would pertain only to unincorporated King County and would likely have a modest effect on reducing greenhouse gas emissions for the County as a whole. To meet the greenhouse gas reduction targets adopted in the 2021 CPPs, incorporated cities in the county would need to implement additional actions beyond current policies and the requirements of existing regulations as well.

Comparison of Action Alternatives

Air quality impacts are not expected to be substantially different between the two action alternatives due the regional influences that affect air quality in King County beyond the County's control. Both alternatives would reduce the risk of wildfires in the county—the Limited Change Alternative would support efforts for wildfire planning and improvements to forest health, while the Extensive Change Alternative would prohibit new development in fire risk areas in the WUI. Though the Extensive Change Alternative would likely prevent more impacts from wildfires than the Limited Change Alternative, the county would still be susceptible to the effects of smoke from wildfires outside the County's jurisdiction, which has had the largest adverse impact to regional air quality in recent years.

The Extensive Change Alternative includes proposals that would better help the County meet its greenhouse gas emission reduction targets in the 2021 CPPs over those included in the Limited Change Alternative. The Extensive Change Alternative would result in a greater degree of denser development patterns, including more high-density housing near transit and employment, which would likely result in a greater reduction of per capita greenhouse gas emissions when compared to the Limited Change Alternative. In addition, the Extensive Change Alternative includes requirements, as opposed to just incentives or support, to reduce greenhouse gas emissions from both County operations and private development, expand electrical vehicle use and infrastructure, and phase out fossil fuels. Collectively, these efforts to reduce greenhouse gas emissions in the County would assist broader efforts to stem the impacts of climate change.

The Extensive Change Alternative would include stronger incentives or requirements for active production of farmland in agricultural zones than the Limited Change Alternative. This would likely result in greater localized air quality impacts within areas zoned for agriculture, particularly within APDs, from dust and particulate matter from vehicle exhaust, farming activities, and agricultural burning, as compared to the Limited Change Alternative. However, these impacts are not anticipated to result in significant adverse impacts as these proposals would comply with existing air quality regulations within agricultural zones.

3.1.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to air quality and greenhouse gas emissions are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts on air quality and minimize greenhouse gas emissions.

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3.2 Water Resources

This section discusses water resources in King County, including surface waters, groundwater, wetlands, flood hazard areas, and shorelines, and evaluates potential impacts to these resources that may be associated with 2024 Update alternatives.

3.2.1 Existing Policy and Regulatory Framework

Some of the primary laws, regulations, and policies guiding water resources in unincorporated King County include the following:

- Clean Water Act, 33 USC 1251, which establishes the basic structure for regulating discharges of
 pollutants into the waters of the United States and regulating quality standards for surface
 waters.
- Safe Drinking Water Act, 42 USC 300, which regulates public drinking water and its sources (rivers, lakes, reservoirs, springs, and groundwater wells).
- Flood Control Management Act, Title 86 RCW, which designates flood control districts and flood plain management provisions.
- Shoreline Management Act, Chapter 90.58 RCW, and Chapters 173-26 and 173-27 WAC, which regulate the state's shorelines.
- Salmon Recovery Act, Chapter 77.85 RCW, which implements various means of salmon recovery.
- Chapter 173-201A WAC, Water Quality Standards for Surface Waters, which establishes water quality standards for surface waters of the state of Washington.
- Chapter 173-200 WAC, Water Quality Standards for Groundwater, which implements Chapter 90.48 RCW, the Water Pollution Control Act and Chapter 90.54 RCW, the Water Resources Act of 1971.
- Chapter 220-660 WAC, Washington State Hydraulic Code, which regulates the construction or performance of work that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state.
- King County Code (K.C.C.) Title 9, Surface Water Management, which provides for the
 comprehensive management of stormwater runoff and surface water and erosion control,
 including programs to reduce flooding, erosion, and sedimentation; prevent and mitigate
 habitat loss; enhance groundwater recharge; and prevent water quality degradation through the
 implementation of comprehensive and thorough permit review, construction inspection,
 enforcement, and maintenance.
- K.C.C. Title 13, Water and Sewer Systems, which designates critical water supply areas and assures consistency between sewer and water system comprehensive plans and adopted County plans, policies, and land use controls.
- K.C.C. Chapter 21A.23, Sea Level Rise Risk Area, Chapter 21A.24, Critical Areas, and Chapter 21A.25, Shorelines, which govern development in sea level rise risk areas, critical areas, and shorelines.

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- King County Board of Health Code Title 12, Water, which outlines rules and regulations for King County public drinking water systems, including protections for critical water supply areas.
- The King County Shoreline Master Program (SMP), which is composed of Chapter 6 of the Current Plan, Shorelines, and implementing regulations found in K.C.C. Chapter 21A.25, Shorelines.
- 2021 King County CPPs, which include policies regarding the management of water resources and other related policies.
- King County Surface Water Design Manual, which is a technical manual that details stormwater management requirements for development in King County.
- King County Flood Hazard Management Plan (Ordinance 17697), which includes flood risk
 reduction strategies and tools and flood management policies such as flood protection
 standards and design, river channel maintenance requirements, land acquisition processes, and
 floodplain land use regulations.

3.2.2 Affected Environment

This section discusses water resources within King County, including surface waters, groundwater, shorelines, and critical areas related to water resources, such as wetlands, flood hazard areas, and critical aquifer recharge areas. Where available, information specific to unincorporated King County is provided; however, because water resources do not conform to political boundaries, the affected environment discusses countywide water resources in a broader context.

3.2.2.1 Surface Waters

Surface waters exist on land surfaces before, during, and after stormwater runoff occurs and includes, but is not limited to, the water found on ground surfaces and in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands, and the Puget Sound, including shallow groundwater. King County has six major river watersheds that carry flows from the Cascade Mountains to Puget Sound. These rivers—the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green, and White—pass through lands ranging in use from forestry to agricultural to highly urbanized. Figure 3.2-1, Surface Water Features, shows the location of lakes, rivers, streams, watersheds, and subbasins in the county.

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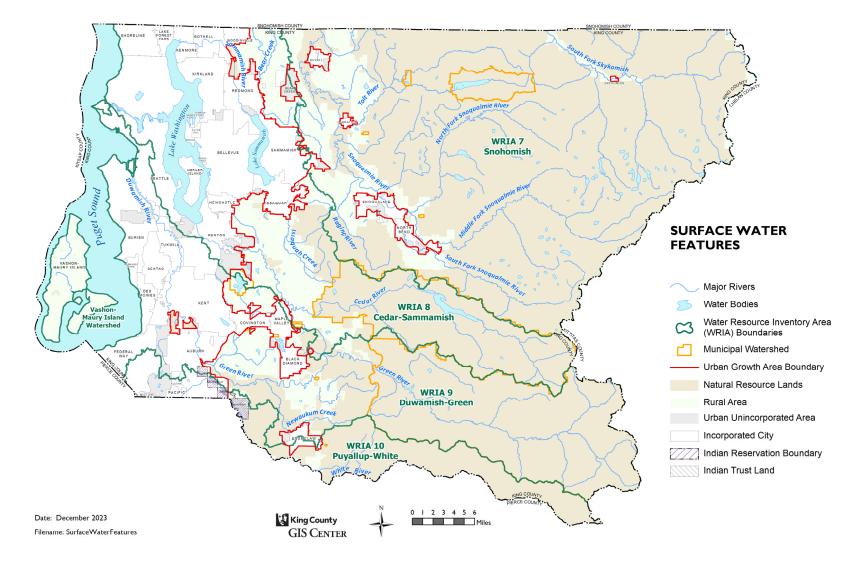


Figure 3.2-1. Surface Water Features

The region has been scoured by ice-age glaciers that carved out hydrologic features, including Puget Sound, Lake Washington, Lake Sammamish, the Snoqualmie River Valley, and the Green River Valley, and shaped the lowland hills, leaving behind patches of conglomerate till and gravelly outwash soil. As the glaciers retreated, they formed a series of long, low gravel ridges across the lowlands, numerous kettle lakes, large lakes (Lake Washington and Lake Sammamish), Mercer Island in Lake Washington, and Vashon-Maury Island, approximately 3 miles offshore the mainland in Puget Sound.⁵²

The consensus of climate change modeling predictions for the Puget Sound region indicates a general trend toward increased precipitation, with typical rainfall events increasing in frequency and magnitude during fall and winter, and an extended and more pronounced summer drought period. ^{53,54} The projected increases in winter precipitation and summer drought intensity are likely to result in a general increase in peak stream flows during wet months and reduced baseflows during dry months. Watersheds in King County that rely on annual snow melt may shift toward increasingly rain-dominated hydrology, altering the timing and frequency of high- and low-flow events.

The quality of surface waters (i.e., the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose) is protected through the implementation of water quality standards authorized by the federal Clean Water Act. Water quality standards are established to sustain public health and public enjoyment of the waters and the propagation and protection of fish, shellfish, and wildlife.

The Clean Water Act requires waterbodies with beneficial uses, such as drinking water, recreation, aquatic habitat, and industrial use, that are historically and currently impaired by pollutants to be listed on the Water Quality Assessment Clean Water Act Section 303(d) list. Once a waterbody is listed on the 303(d) list, states are required to develop a "total maximum daily load" (TMDL) for each pollutant causing impairment, and to develop and prioritize water quality improvement projects that address those impairments. A TMDL is the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet water quality standards for pollutants of concern.

Table 3.2-1, Water Quality Impairments – General Summary, provides a brief description of the types of water quality impairments identified in unincorporated King County and potential sources or contributing factors. A majority of water quality impairments are located in incorporated areas, though some examples of impaired waterbodies in unincorporated King County include Green River (dissolved oxygen), Snoqualmie River (inorganic pollutants), Raging River (pH, temperature), Newaukum Creek (bacteria), Big Soos Creek (temperature, dissolved oxygen), and Fivemile Lake (organic pollutants).⁵⁶

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⁵² King County, King County Biodiversity Report, 2008. [LINK]

⁵³ Mauger et al., State of Knowledge: Climate Change in Puget Sound, November 2015. [LINK]

⁵⁴ Snover et al., Climate Change Impacts and Adaptation in Washington State: Technical Summaries for Decision Makers, December 2013. [LINK]

⁵⁵ Ecology, Washington State Water Quality Assessment 303(d)/305(b) List, 2022. [LINK]

⁵⁶ Ecology, Water Quality Atlas Map, 2023. [LINK]

Table 3.2-1. Water Quality Impairments – General Summary

303(d) Listed Pollutant	Description	Common Sources/ Contributing Activities ^a
Bacteria	Exposure to bacterial contaminants can make recreational users sick and harm aquatic species as well as contaminate sources of drinking water. Examples include but are not limited to the following: Escherichia coli (E. coli), Enterococci, and fecal coliform.	Septic failure.Pet waste.Livestock.Illicit discharges.
Dissolved Oxygen (DO)	Levels of dissolved oxygen in water bodies outside of acceptable ranges for aquatic species can result in dead zones incapable of supporting most species.	 Decomposition of natural organic matter. Excess nutrients. Seasonally elevated stream temperatures (summer/fall).
Hq	pH levels outside of acceptable ranges for aquatic species can cause bodies of water to become too acidic or too basic.	Industrial waste.Landfill contamination.Animal farm runoff.
Temperature ^b	Temperature levels outside of acceptable ranges for aquatic species can be lethal, especially for fish like salmonids. In general, water bodies tend to warm in summer months, and often the contributing factors can compound, making solutions complex.	 Loss of vegetation along shorelines and aquatic areas. Low flows. Modification of natural flow volumes (water withdrawals) and timing (dams). Climate change.
Pollutant – Organics	Pollutants in surface waters can sink and contaminate sediments. Groundwater can become contaminated when pollutants in subsoil leach to groundwater. Examples include but are not limited to the following: nutrients (e.g., phosphorous), sediments, and pathogens.	Agricultural runoff.Pet waste.Illicit discharges.Septic failures.
Pollutant – Inorganics	There as many as 300 substances. Some pollutants may be classified as "forever chemicals," due to their environmental persistence. Pollutants in surface waters can sink and contaminate sediments. Groundwater can become contaminated when pollutants in the subsoil leach to groundwater. Exposure to pollutants can lead to a variety of short- and long-term health effects.	 Pollution-generating impervious surface runoff. Automobile tires. Urban development. Illicit discharges. Industrial by-products. Legacy contaminants.
	Examples include but are not limited to the following: metals, hydrocarbons, chemical pesticides, and volatile organic compounds.	

^a These sources and contributing activities are provided as general examples of commonly identified sources for each class of pollutants. This list is not intended to be used for any purpose other than general information about water quality impairments.

^b U.S. EPA, Climate Change Indicators in the United States: Stream Temperature, August 2016. [LINK]

King County regulates the discharge of water pollutants as a Phase I permittee under Ecology's National Pollution Discharge Elimination System Municipal Stormwater General Permit. This permit requires existing and new development to implement best management practices for design related to stormwater flow control and the protection of water quality as outlined in the King County Surface Water Design Manual and the King County Stormwater Pollution Prevention Manual.

Additionally, King County is committed to protecting water quality and habitat throughout King County under initiatives such as the Clean Water, Healthy Habitat Strategic Plan. This plan has six goals, each with defined outcomes, strategies, and 5-year actions: healthy forests and more green spaces; cleaner, controlled stormwater runoff; reduced toxics and fecal pathogens; functioning river floodplains; better fish habitat; and resilient marine shorelines. These goals are structured to both protect resources in the face of population growth and climate change and to achieve net gain in several natural environment and human health outcomes, including reconnection of floodplains, reduction in shoreline armoring, improving stream health, and safer fish consumption and swimming in local waters.

3.2.2.2 Wetlands

Wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.⁵⁷ There are thousands of mapped wetlands in unincorporated areas of King County.⁵⁸ Because of its size, variety of landforms, and diverse landscapes (marine to alpine), the county includes a large diversity of palustrine, lacustrine, riverine, estuarine, and marine wetlands, which are described below:⁵⁹

- Palustrine wetlands, also called emergent wetlands, include forest, shrub/scrub, bog and peatlands, wet meadow, and marsh type wetlands; these are the most common wetlands in King County.
- Lacustrine wetlands are those associated with littoral zones (the shallow edges of lakes and ponds).
- Riverine wetlands occur along the edges of rivers and streams, in sloughs and backwaters, and in abandoned bends and oxbows.
- Estuarine wetlands occur at the interface of marine waters with freshwaters, usually at river mouths.
- Marine wetlands include saltwater-fringing marshes and backshore wetlands.

Wetlands differ widely in their function and value, which can include ecological, economic, recreational, and aesthetic benefits. Wetland functions can include water quality treatment, flood control, shoreline stabilization, aquifer recharge for drinking water and other uses, and as critical habitat for fish and wildlife. Ecology's Wetland Rating System categorizes wetlands based on specific attributes such as their sensitivity to disturbance, significance, rarity, ability to be replaced, and function.

The intent of the rating categories is to provide a basis for developing standards for protecting and managing the wetlands based on their sensitivity and function, which includes the buffer widths needed

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⁵⁷ K.C.C. 21A.06.1391.

⁵⁸ King County GIS Open Data, Wetlands defined from Critical Area Ordinance surveys in King County, 2018. [LINK]

⁵⁹ King County, King County Biodiversity Report, 2008. [LINK]

to protect the wetland from adjacent development and permitted uses in, and around, the wetland.⁶⁰ Wetland systems that are extremely sensitive or have important functions require larger buffers to protect them from disturbances that may be of lesser threat to a different site. Wetland systems rated as rare or irreplaceable (e.g., high quality estuarine wetlands, mature swamps, and bogs) need greater buffer widths to lower their risk of disturbance.

Wetlands are designated as critical areas by the state of Washington, for which the County sets the policies and regulations that protect their functions and values under K.C.C. Chapter 21A.24. The County currently requires site-specific critical area designations when reviewing development applications and requires permittees to offset impacts to wetlands and their buffers with compensatory mitigation actions on the same site as the impacts, off-site, or through the purchase of credits from King County or another approved mitigation provider. Revenue from the purchase of credits from the County is used to restore, establish, enhance, and/or preserve wetlands, river, stream, and buffers within the same watershed as the impact.

3.2.2.3 Flood Hazard Areas

Major flood events along the rivers in King County result in two primary types of flood hazards: inundation and channel migration.⁶¹ Inundation is defined as floodwater and debris flowing through an area that is not normally underwater. Channel migration is a natural process whereby rivers move across their floodplains, either gradually or suddenly when a river jumps course. Gradual channel migration occurs when riverbank erosion either widens the channel, causes a shift in the location of a meander bend, or is coupled with sediment deposition along the opposite bank results in the lateral movement, or migration, of a channel across its floodplain. Abrupt channel migration occurs when a channel suddenly changes in its location, a process known as called avulsion. Avulsion is a key process in the building of alluvial fans, which are broad, gently sloping, fan-shaped landforms made of sediment and debris deposited when a stream emerges from steep hillslopes onto a wide, flat valley. Because these streams drain upland areas, alluvial fans are more prone to floods and debris flows.

Flood hazard areas are designated as critical areas by the state of Washington, for which the County sets the policies and regulations under K.C.C. Chapter 21A.24, consistent with federal law. Flood hazard areas may contain one or more features such as floodplains, special flood hazard areas, zero-rise flood fringe, zero-rise floodways, Federal Emergency Management Agency floodways, coastal flood zones, and channel migration zones. Flood hazard areas are areas subject to inundation by the base flood or at risk from channel migration, including but not limited to an aquatic area, wetland, or closed depression. The base flood is defined as a flood having a 1 percent chance of being equaled or exceeded in any given year and is often referred to as the "100-year flood." Flood hazard areas and water resource features are shown in Figure 3.2-2, Flood Hazard Areas.

⁶⁰ Ecology, Wetland Rating System for Western WA: 2014 Update, October 2014. [LINK]

⁶¹ King County, 2006 King County Flood Hazard Management Plan, 2007. [LINK]

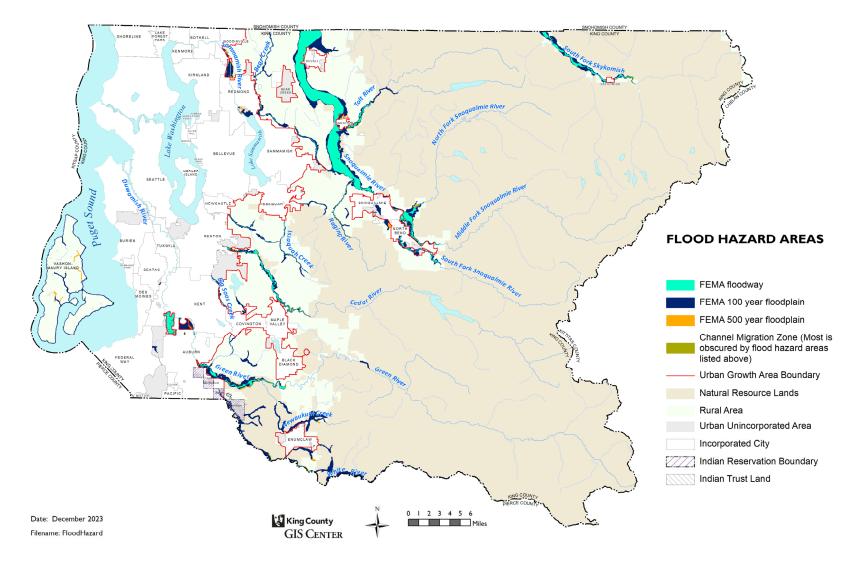


Figure 3.2-2. Flood Hazard Areas

As described previously King County has six major rivers—the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green, and White. If the flood and channel migration hazards associated with these rivers and tributary streams are not well managed, they can pose extensive risks to people who live and work in the river floodplains. Along rivers, streams, and shorelines in the county, approximately 500 flood facilities, including levees, dikes, and bank revetments, have been constructed and maintained to reduce the risk of flooding and deter channel migration, allowing areas that may otherwise be naturally inundated by floodwaters to be used for agriculture, industry, infrastructure, and urban development.⁶²

The shorelines surrounding Vashon-Maury Island are classified as coastal high hazard areas, identified by the Federal Emergency Management Agency as coastal areas with a 1 percent or greater chance of flooding during a base flood event and an additional velocity hazard associated with storm waves.

Climate change is anticipated to result in a rise in sea level and an increase in storm surges along coastal shorelines. These climate-related effects could increase the frequency of flooding and may, in turn, lead to negative effects on coastal areas as well as stream structure and function as a result of increased erosion and sedimentation. Additionally, wildfires can change the hydrologic properties of soil, causing water to run off more easily and, when paired with a lack of vegetation, can lead to increased flooding leading to sudden catastrophic events.⁶³

3.2.2.4 Shorelines

The Shoreline Management Act and the King County SMP regulate all shorelines and shorelands.⁶⁴ Shorelines include all marine shorelines, lakes greater than 20 acres, and rivers and streams with 20 cubic feet per second mean annual flow or greater. Shorelands are defined as those areas extending landward for 200 feet from the ordinary high-water mark, floodways, and contiguous floodplain areas landward 200 feet from such floodways, and all associated wetlands and river deltas. King County includes the 100-year floodplain in its shoreline jurisdiction.⁶⁵ Within the shoreline jurisdiction, some areas are further defined as Shorelines of Statewide Significance, which include Puget Sound shorelines on Vashon-Maury Island, lakes greater than 1,000 acres, and rivers with 1,000 cubic feet per second mean annual flow or greater.⁶⁶

Shorelines are vital to maintaining the overall health of lakes and other bodies of water and help maintain water quality, protect against erosion, reduce the impacts of flooding, and provide habitat for fish and wildlife. King County's shoreline jurisdiction includes nearly 2,000 miles of saltwater coastline, river floodplains, and extensive lakes and includes the marine shorelines and associated waters, sections of all rivers, and the larger streams that occur in unincorporated King County.⁶⁷

See Figure 3.2-3, Shorelines of the State, which displays the shorelines regulated by the County's SMP, by environmental designation. The environmental designations covered in the SMP are discussed further in Section 4.2, Land Use and Aesthetics.

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⁶² King County, King County Department of Natural Resources and Parks Annual Report, 2018. [LINK]

⁶³ Washington Department of Natural Resources, Floods after Fires, 2013. [LINK]

⁶⁴ King County, 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

⁶⁵ Ibid.

⁶⁶ WAC 173-18-210, Shoreline Management Act, King County Streams. [LINK]

⁶⁷ King County, King County Department of Natural Resources and Parks Annual Report, 2018. [LINK]; 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

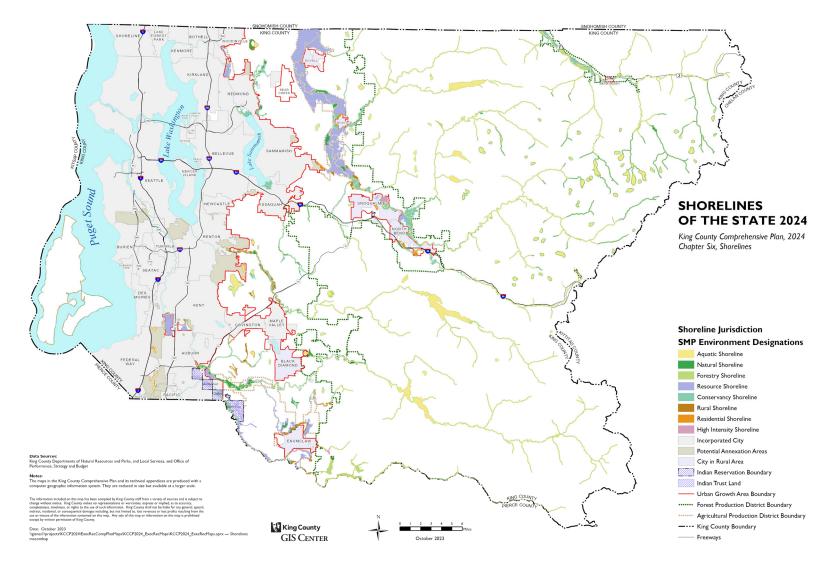


Figure 3.2-3. Shorelines of the State

3.2.2.5 Groundwater

Groundwater is water that collects or flows beneath the earth's surface. Groundwater originates from surface waters (e.g., precipitation, rivers, stormwater) and percolates through pervious surfaces to fill aquifers.⁶⁸ In King County, groundwater is used for drinking water, irrigation, and industrial uses, and it also replenishes streams, lakes, and wetlands to supply water for fish and wildlife. An estimated 30 percent of King County's population relies on groundwater wells for drinking water, which is over half a million people.⁶⁹ Within unincorporated King County, most groundwater wells are located in the Rural Area, and a majority of these wells are for individual domestic use as opposed to public water systems.

King County has five designated groundwater management areas and a Groundwater Protection Program that aims to provide management, policy, and technical expertise to help protect the quality and quantity of the groundwater resources in King County. See Section 4.1, Utilities and Public Services, for a discussion about critical water supply areas for water service.

Critical Aquifer Recharge Areas (CARAs) are designated as critical areas by the state of Washington, for which the County sets the policies and regulations that protect their functions and values under K.C.C. Chapter 21A.24. CARAs are defined by the County in K.C.C. 21A.06.253C as areas that have a high susceptibility to groundwater contamination, areas of medium susceptibility to groundwater contamination that are located within a sole source aquifer or are within a wellhead protection area for a municipal or district drinking water system, or areas that are over a sole source aquifer and are located on Vashon-Maury Island.

Susceptibility to groundwater contamination can occur where there is a combination of permeable soils, permeable subsurface geology, and groundwater close to the ground surface. The goal of establishing CARAs is to protect the community's drinking water by preventing pollution and maintaining supply. CARAs are categorized so that greater control can occur where land use activities are a high risk for polluting sensitive aquifers. Table 3.2-2, Critical Aquifer Recharge Area Categories, summarizes the CARA classifications the County has established, and Figure 3.2-4, Critical Aquifer Recharge Areas and Groundwater Management Areas, shows the CARAs in King County.

 Table 3.2-2.
 Critical Aquifer Recharge Area Categories

Category	Susceptibility to Contamination	Located within sole source aquifer or well head protection area	Additional Criteria
I	High	Yes	N/A
İ	Any	Yes	Located in an area where hydrogeologic mapping or a transport model demonstrates a 1-year time of travel to a wellhead for a Group A water system.
II	Medium	Yes	N/A
II	High	No	N/A
III	Low	Yes	Located over an aquifer underlying an island that is surrounded by saltwater.

Sources: K.C.C. 21A.24.313; Washington State Department of Health, Owning and Managing a Group A Water System (DOH 331-084), December 2013. [LINK]

⁶⁸ Ecology, Groundwater, 2023. [LINK]

⁶⁹ King County, Groundwater Management, 2023. [LINK]

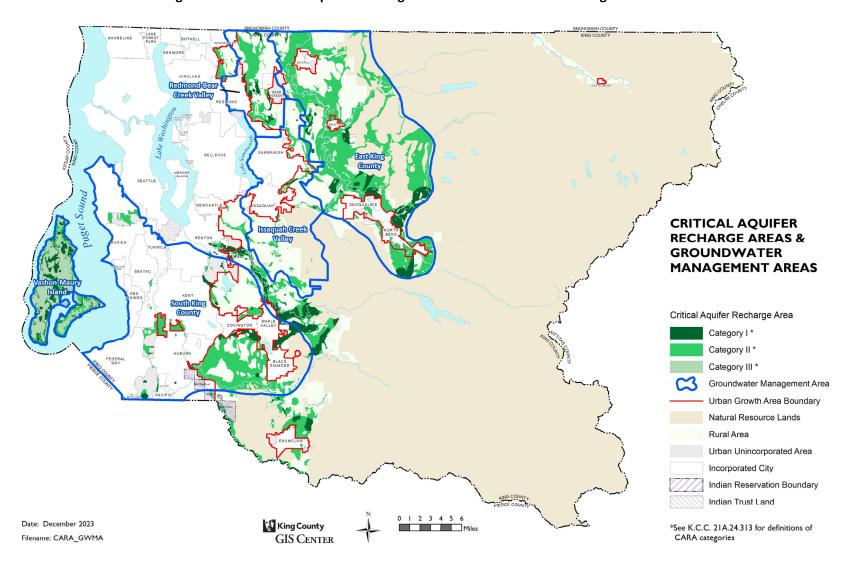


Figure 3.2-4. Critical Aquifer Recharge Areas and Groundwater Management Areas

3.2.3 Environmental Consequences

3.2.3.1 No Action Alternative

Under the No Action Alternative, water quality trends and approaches to the management of water resources would generally continue as described in the Affected Environment section.

Surface Waters

Under the No Action Alternative, anticipated development would include facilities designed to provide stormwater flow control and water quality treatment for future growth or redevelopment of existing structures. The No Action Alternative would be designed to incorporate stormwater management features that meet state and local stormwater requirements.

Construction associated with development under the No Action Alternative could affect surface water quality by increasing the potential for sedimentation and turbidity impacts resulting from clearing and grading activities and increased erosion and sedimentation runoff from active work areas. Vehicle miles traveled and transportation-related pollutant loads would increase along with population and job growth. Pollution-generating impervious surfaces, including roadways and parking areas, have the potential to accumulate contaminants that can be transported by stormwater runoff into receiving water bodies.

Development generally results in an increase in impervious surface from new parking areas, building roofs, roads, and stormwater ponds (which are considered impervious during rain events) when filled with water. These surfaces could result in an increase in runoff volumes and decrease in groundwater recharge, which may increase flooding and reduce average water flow frequencies. In places where some runoff does infiltrate into the ground, pollutants carried from pollution-generating impervious surfaces can contaminate groundwater. Also, increased surface flow volumes and water quality impairments can contribute to stream erosion and aquatic habitat degradation. However, existing regulations minimize such impacts associated with new development.

Under the No Action Alternative, the County would continue to operate under existing programs, policies, and initiatives to improve water quality by investing in upgrades and maintenance to stormwater and wastewater treatment infrastructure, reduction in toxics and fecal pathogens, and through the removal of fish passage barriers (including culverts).

One such existing program includes replacing culverts on fish-bearing streams. The relocation and redesign of heavily modified conveyance systems return them to more naturally connected states that can result in several beneficial impacts on water resources, in addition to restoring fish access. These benefits are site specific, but the designs typically include larger hydraulic openings than the existing culverts they are replacing, which can support more natural sediment transport patterns in the stream and potentially improve water quality.

Wetlands

Under the No Action Alternative, potential impacts to wetlands due to development would be site specific, and the County would continue to be guided by existing policies and regulations including applicable buffers, mitigation, and permitting requirements.

Flood Hazard Areas

Under the No Action Alternative, the County would continue to maintain existing flood structures and revetments, replace identified fish passage barriers, and require new development or redevelopment projects within flood hazard areas to comply with relevant development standards, including minimum building standards and compensatory flood storage. Compensatory storage is required to offset the placement of fill and maintain the current natural storage function and volume of the floodplain.

Shorelines

Under the No Action Alternative, the County would continue to maintain existing shoreline stabilization regulations, which limit construction of new structures, including bulkheads, levees and revetments along marine and lake shorelines to reduce shoreline erosion. This would result in overall benefits for shoreline environments, as studies have shown that bulkheads can increase erosion, decrease important sediment transport processes, contribute to a loss of shoreline vegetation and as a result shade, and contribute to habitat loss for fish and wildlife in both aquatic and terrestrial habitats.⁷⁰

Groundwater

Under the No Action Alternative, current development patterns would continue to occur, including the conversion of undeveloped land to impervious surfaces. Impacts resulting from development activities such as clearing, grading, or altering the natural conveyance of surface overland flows have the potential to decrease groundwater and aquifer recharge rates and increase the possibility of contamination. When natural infiltration processes are disrupted, this can also impact stream flows because groundwater is an important contributor to instream flow volumes, especially in drier summer months. Low flows can result in increased stream temperature, higher pollutant concentrations, and degradation and loss of habitat for aquatic species. Additionally, runoff from new roadways, parking lots, agricultural land, landscapes, and yards carry metals, excess nutrients, and pathogens into aquifers groundwater supplies.

3.2.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Generally, both action alternatives seek to develop a framework for water resources, shorelines, and critical areas that builds on past successes, ensures accountability, encourages innovation, and uses the latest science. Generally, both action alternatives would promote denser development by making changes to zoning allowances and incentives. To a varying degree, both action alternatives have the potential to result in improvements to water quality and greater protections for water resources and critical areas, including surface waters, groundwater, wetlands, and shorelines.

The action alternative proposals that would affect water resources include proposals that expand housing options and promote population growth and development; update critical areas regulations; change allowances for industrial zoning in the Rural Area and on Natural Resource Lands; support fish habitat and floodplain restoration activities in APDs; and regulate shoreline stabilization. The action alternatives are not anticipated to result in significant adverse impacts as future development would incorporate stormwater management features designed to provide flow control and water quality treatment that meet state and local stormwater requirements.

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⁷⁰ Ecology, Shoreline Armoring Effects on Coastal Ecology and Biological Resources in Puget Sound, Washington, August 1994. [LINK]

Surface Water

Both of the action alternatives would result in changes to the location, type, and character of development in unincorporated King County, which would result in the reduction of vegetation and increases to impervious surface, similar to the potential impacts described for the No Action Alternative.

Both action alternatives include incentives or requirements for active production of farmland in agricultural zones. This would likely result in greater localized water quality impacts within areas used for agriculture, particularly within APDs. Agricultural practices can cause water quality impacts like nutrient loading, increased sedimentation and erosion, and organic and inorganic pollutants associated with agricultural farming activities. These impacts could translate to water quality impairments such as decreased dissolved oxygen, increased turbidity, high water temperatures, and water pollutants above the regulatory limits (including nutrients and bacteria from animal wastes and fertilizers) that harm aquatic species.

Wetlands

Under both action alternatives, there is the potential to improve wetland health and function by providing greater protection for critical areas and related water resources, including wetlands and floodplains. These policies and regulations would promote biodiversity and habitats with important ecological functions by updating critical area buffers and avoidance and mitigation requirements for development near wetlands located in unincorporated areas of King County.

Flood Hazard Areas

Both action alternatives would likely protect and restore the critical functions of floodplains through revisions to the County's shoreline and critical areas regulations. Both action alternatives include proposals that would update critical areas regulations with the best available science, such as to manage development within alluvial fans, and to encourage soft or natural shoreline stabilization methods. These regulations would update requirements for buffers and mitigation measures or prohibit development within areas at risk for erosion, landslides, and sudden catastrophic flooding, and reduce flood-related risks to human life and damage to property and infrastructure.

Both action alternatives would also support floodplain management efforts by incorporating recommendations from the Fish, Farm, Flood Advisory Committee flood management strategies within APDs. This initiative would include a multifaceted approach to balance the needs of food production and management of flood-related risks to human life and property, while also addressing environmental quality and ecological habitat concerns in these areas. Potential benefits and adverse impacts would be site specific, as some areas or projects would prioritize expansion of commercial agriculture operations and others would prioritize salmon habitat restoration. Strategies that would benefit floodplain habitats include the removal of existing levee structures and revetments and replacement with more natural shorelines; replanting with native vegetation to improve riparian function and habitat; and the addition of fish-passable culverts, side channels, and large woody debris.

The addition of fish-passable culverts would have the same potential benefits described under the No Action Alternative and would be dependent on the extent in which they are implemented.

Shorelines

Both action alternatives would make updates to the County's shoreline regulations to promote the use of natural shoreline features in new development and encourage long-term stabilization approaches based on an improved understanding of shoreline processes. Additional requirements for shoreline development setbacks, preservation of native vegetation, and inclusion of natural beach contours would help protect water quality by stabilizing shoreline slopes, absorbing wave energy, filtrating runoff, and providing shade.

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Groundwater

Both action alternatives would increase the potential to disturb layers of contaminated soil and introduce migration pathways for pollutants into aquifers as a result of allowing additional development in less developed areas, such as allowing more industrial uses in the Rural Area or on Natural Resource Lands. Soil disturbance in areas with existing or historical intensive uses, such as solid waste, materials processing, or mineral extraction, carry the risk of encountering contaminated materials and soils, which could introduce contamination and impact groundwater sources. Runoff from site-specific activities associated with industrial use also has the potential to impact groundwater quality.

However, impacts to groundwater would be limited due to protections within groundwater management areas and CARA boundaries. Additionally, the action alternatives would allow more substantial increases in residential density in urban unincorporated areas as compared to the No Action Alternative, which could help concentrate future development in already developed areas and limit the conversion of additional pervious surfaces to impervious surfaces. This would be beneficial for groundwater infiltration and for preventing additional impacts to drinking water sources and stream flows.

Comparison of Action Alternatives

Stormwater quality impacts are not expected to be substantially different between the action alternatives. However, the Extensive Change Alternative proposals could result in denser development within urban unincorporated areas, closer to public transit and employment options, which could result in less development and associated increases in stormwater runoff in undeveloped areas than might occur under the No Action Alternative.

The Extensive Change Alternative would include more substantive updates to critical areas codes governing water resources and would require, restrict, or prohibit certain types of development within designated floodplains and shorelines. Stronger critical areas protections under the Extensive Change Alternative would likely benefit water resources more than the less stringent proposals included in the Limited Change Alternative. Additionally, the Extensive Change Alternative would expand the geographical extent of habitat and floodplain restoration efforts as compared to the Limited Change Alternative. For example, under the Limited Change Alternative implementation of the Fish, Farm, Flood recommendations would apply to the Snoqualmie Valley APD; under the Extensive Change Alternative, it would expand to all APDs.

The Extensive Change Alternative would also include stronger incentives or requirements for active production of farmland in agricultural zones than the Limited Change Alternative. This would likely result in greater localized water quality impacts within areas zoned for agriculture, particularly within APDs, from nutrient loading, increased sedimentation and erosion, and organic and inorganic pollutants associated with agricultural farming activities as compared to the Limited Change Alternative. However, these impacts are not anticipated to result in significant adverse impacts as these proposals would comply with existing water quality regulations in agricultural zones.

The Extensive Change Alternative would allow some additional industrial uses in the Rural Area and on Natural Resources Lands, including past intensive use sites, which could increase the potential for impacts to surface water and groundwater resources from soil contamination and site runoff as compared to the Limited Change Alternative.

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3.2.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to water resources are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts on water resources, such as compliance with local stormwater management requirements, using best management practices during construction, encouraging sustainable low-impact development approaches where feasible, and by preparing for climate-related uncertainties where practicable.

3.3 Wildlife and Habitat

This section discusses wildlife and habitat in King County and evaluates potential impacts to these resources that may be associated with the 2024 Update alternatives.

3.3.1 Existing Policy and Regulatory Framework

Some of the primary laws, regulations, and policies guiding wildlife and habitat resources in unincorporated King County include the following:

- Endangered Species Act (ESA), 16 USC 1531, which establishes protections for fish, wildlife, and plants that are listed as threatened or endangered.
- Migratory Bird Treaty Act, 16 USC 703-712, which prohibits the taking of protected migratory bird species without prior authorization.
- Bald and Golden Eagle Protection Act, 16 USC 668-668C, which prohibits the taking of bald or golden eagles.
- Marine Mammal Protection Act, 16 USC 1361-1407, which establishes a moratorium on taking and importing marine mammals.
- Title 77 RCW, Fish and Wildlife, which includes regulations to preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters.
- Chapter 17.10 RCW, Noxious Weeds, which regulates noxious weeds on all terrestrial and aquatic areas of the state.
- Title 220 WAC, Department of Fish and Wildlife, which sets out department rules related to the preservation, protection, perpetuation, and management of fish and wildlife of the state, including fish passage.
- K.C.C. Chapter 21A.24, Critical Areas, and Chapter 21A.25, Shorelines, which govern development in and protection of critical areas and shorelines.
- 2021 King County CPPs, which include policies aimed at maintaining biodiversity and protecting species, including salmon, and other related policies.
- 2020 SCAP, which outlines the County's priorities and commitments for climate action over a 5year horizon, including goals to protect high-value forests and farmland, expand forest canopy, restore the health, viability, and climate resilience of forests and farmland.
- Water Resource Inventory Area (WRIA) 7, 8, 9, 10, and Vashon-Maury Island watershed and salmon recovery plans, which outline goals and recommendations for watershed-level water quality and salmon conservation efforts.

3.3.2 Affected Environment

The sections below discuss existing conditions and trends related to wildlife and habitat. Where available, information specific to unincorporated King County is provided; however, because plants and animals do not conform to political boundaries, policies and regulations implemented in unincorporated King County have the potential to impact wildlife and habitat countywide and beyond.

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King County has a diverse array of landscapes and habitats, ranging from the Puget Sound lowlands to the Cascade Mountain highlands. These habitats are home to over 200 species of breeding and non-breeding birds, over 70 species of mammals, over 20 species of amphibians and reptiles, over 200 species of freshwater and marine fish, over 500 species of invertebrates, and thousands of vascular plant species.⁷¹

King County has three major ecoregions, which are the largest units of biodiversity used by the County for landscape level planning: the Puget Lowland ecoregion, the North Cascades ecoregion, and the Cascades ecoregion (Figure 3.3-1, Wildlife Habitat Network and Ecoregions).⁷² These ecoregions exclude the Puget Sound marine environment which forms the county's western border and is dominated by shoreland and open water ecosystems.⁷³

- The Puget Lowland ecoregion (comprised of the Eastern Puget Riverine Lowlands, Eastern Puget Uplands, and Central Puget Lowlands subregions) is the largest with over one-third of the county's total area, though much of it is within incorporated cities of western King County. The ecoregion contains relatively low biodiversity in the western lowlands which are dominated by urban and suburban land uses, but species and habitat diversity increase in the eastern uplands where agriculture and forest production lands are protected by the County.
- The Cascades ecoregion (comprised of the Western Cascades Lowlands and Valleys and Western Cascades Montane Highlands subregions) is in the southeastern portion of the county and is almost entirely within unincorporated King County. This ecoregion contains the Cedar River, Green River, and White River watersheds, and is dominated by agriculture and timber harvest.
- The North Cascades ecoregion (comprised North Cascades Lowland Forests, North Cascades Highland Forests, and North Cascades Subalpine/Alpine subregions) is in the northeastern and east central parts of the county. It consists of mostly unincorporated King County from the upslope valleys of King County's major rivers systems (Skykomish, Tolt, and Snoqualmie rivers) to the alpine forests. The ecoregion is characterized by dense timber and includes the least disturbed landscapes in King County (Alpine Lakes and Henry M. Jackson wilderness areas).

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⁷¹ King County, Defining Biodiversity, 2023. [LINK]

⁷² King County, King County Biodiversity Report, 2008. [LINK]

⁷³ King County, Ecoregions, 2023. [LINK]

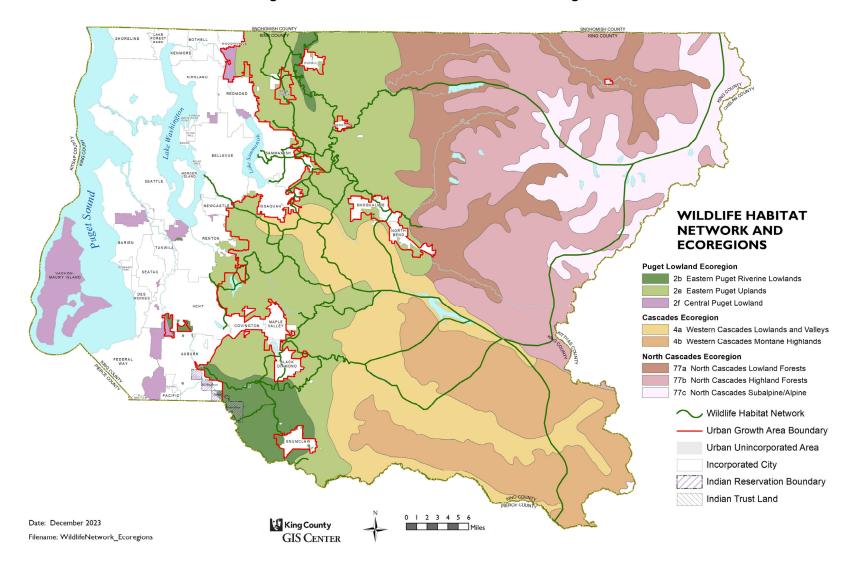


Figure 3.3-1. Wildlife Habitat Network and Ecoregions

3.3.2.1 Habitats, Conservation Areas, and Networks

King County includes aquatic and terrestrial habitats. Aquatic habitats include a variety of wetland types, lakes, rivers, and streams, along with their riparian areas, and the estuaries and nearshore habitat of the Puget Sound. Terrestrial habitats include distinct land-based vegetation communities in the lowlands, highlands, and subalpine areas of the county. Ongoing development, however, has threatened ecosystem health and wildlife and vegetation populations for over 150 years, especially in the western half of the county. Much of the forests, wetlands, and grassy meadows have been impacted resulting in loss of native habitats and species. Development, associated habitat loss, and fragmentation are the top threats to biodiversity in King County along with invasive species and climate change.

The Washington Department of Fish and Wildlife (WFDW) uses the Priority Habitats and Species Program to identify species and habitat types for which special conservation measures should be taken. Priority habitats are those with unique or significant value to multiple species, and they consist of a unique vegetation type, dominant plant species, or specific habitat feature. Of the 20 types of priority habitats in Washington, King County is home to 13, including six terrestrial habitats (biodiversity areas and corridors, herbaceous balds, old growth/mature forest, Oregon white oak woodlands, Westside prairie, riparian), three aquatic habitats (freshwater wetlands and fresh deepwater, instream, Puget Sound nearshore) and four habitat features (caves, cliffs, snags and logs, and talus). Fe Several of these habitat types are also designated as Habitats of Local Importance in the Current Plan.

Additionally, King County restricts development activities in fish and wildlife habitat conservation areas, which include active breeding sites and the surrounding areas for nine species: bald eagle, great blue heron, marbled murrelet, northern goshawk, osprey, peregrine falcon, northern spotted owl, Townsend's big-eared bat, and Vaux's swift.⁷⁸ Wildlife habitat conservation areas also protect all active breeding sites of any federal or state listed endangered, threatened, sensitive, and candidate species, as well as King County Species of Local Importance, which are discussed in the following section. These habitat conservation areas are evaluated on a case-by-case basis during project design and construction.

Finally, the County has identified almost 460 miles of wildlife habitat network, over 400 of which are currently located within unincorporated King County. The wildlife habitat network, defined and mapped in the Current Plan, links wildlife habitat with critical areas and buffers, priority habitats, trails, parks, open space, and other areas to provide for wildlife movement and alleviate habitat fragmentation.⁷⁹ Figure 3.3-1, Wildlife Habitat Network and Ecoregions, shows biodiverse areas and corridors that connect critical wildlife habitats and protected lands throughout the county.

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⁷⁴ King County, King County Biodiversity Report, 2008. [LINK]

⁷⁵ King County, Threats to Biodiversity in King County, 2023. [LINK]

⁷⁶ WDFW, Priority Habitat and Species List, 2023. [LINK]

⁷⁷ King County is updating the Species of Local Importance in the 2024 Update.

⁷⁸ K.C.C. 21A.24.382.

⁷⁹ K.C.C. 21A.06.1424.

3.3.2.2 Special Status Species

Several plant and animal species in King County are protected by a combination of federal, state, and local regulations. Chapter 5, References and Supporting Information, includes a list of federal and state-listed threatened and endangered species and descriptions for various designation types, as well as County-designated Species of Local Importance.

Federal protections exist for species listed as endangered or threatened under the ESA by the U.S. Fish and Wildlife Service. There are 17 federally listed, proposed, and candidate animal species known to occur in King County, including six fish, four bird, four mammal, one amphibian, one reptile, and one invertebrate species. WDFW identifies priority species via the Priority Habitat and Species list, which includes all state endangered, threatened, sensitive, and candidate species; vulnerable animal groups; and vulnerable species of recreational, commercial, or Tribal importance. There are 33 state-listed animal species known to occur in King County, including five fish, nine bird, eight mammal, three amphibian, one reptile, and seven invertebrate species. Additionally, the Washington Natural Heritage Program identifies 34 special-status plant species found in King County, 26 of which are ESA listed or proposed species.

At the local level, King County code protects Species of Local Importance, which are listed in the comprehensive plan. These include all federal and state-listed threatened and endangered species and other species that are of local concern because of their population status or their sensitivity to habitat manipulation. King County Species of Local Importance are identified so that they and their habitats may be considered during land use planning and protected during project construction.

3.3.2.3 Fish Passage Barriers

Fish passage barriers, including road culverts, dams, dikes, and other obstructions, are one of the primary threats to ESA-listed fish species—Chinook salmon, Bull Trout, and Steelhead—because they prevent fish from accessing upstream rearing habitat. Several ESA listed fish species are present within major rivers and streams throughout King County, including waterbodies in both unincorporated areas and incorporated cities. The presence of these fish species can serve as an indicator for the health of other species because they have well-defined and documented aquatic habitat requirements and are sensitive to small changes in environmental conditions.⁸¹

There are almost 11,000 fish passage barriers located within the county, of which approximately half are in unincorporated King County. ⁸² In a countywide inventory of fish passage barriers, King County identified over 900 County-owned barriers (Figure 3.3-2, Fish Passage Barrier Assessment). ⁸³ The County is prioritizing barriers for removal and restoration based on the potential habitat gain for each barrier, using a formula that characterizes stream habitat quantity and quality based on intrinsic potential of juvenile rearing, connectivity based on surrounding upstream and downstream barriers, habitat quality based on land cover, and the potential for use by Chinook or Lake Sammamish kokanee.

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⁸⁰ WDFW, Priority Habitat and Species List, 2023. [LINK]

⁸¹ NOAA, Endangered and Threatened Species; Take of Anadromous Fish; Federal Register Vol. 82, No. 219, Wednesday, November 15, 2017, Notices, pp. 52884–52888.

⁸² King County, GIS Open Data – Fish Passage Sites, October 2021. [LINK]

⁸³ King County, King County Fish Passage Barrier Prioritization Summary Report, June 2022. [LINK]

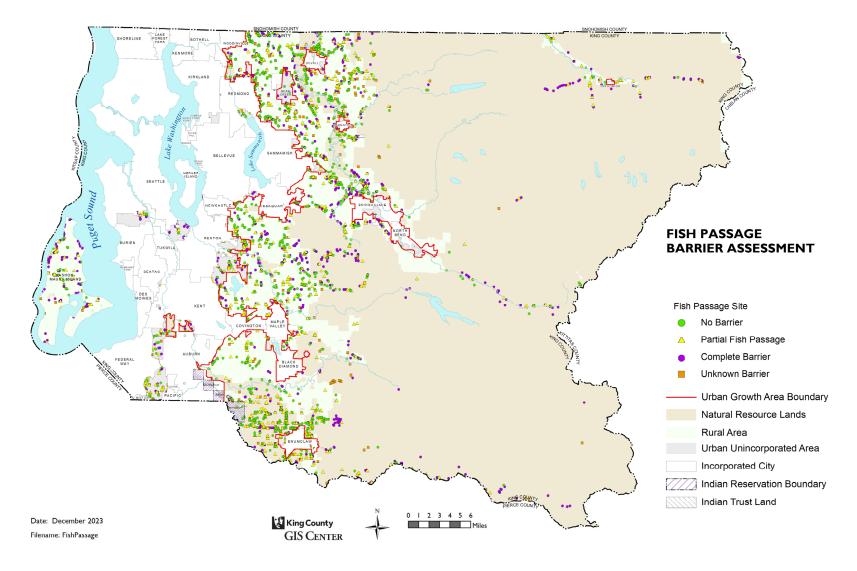


Figure 3.3-2. Fish Passage Barrier Assessment

3.3.2.4 Invasive Species

As development throughout the county has expanded and disrupted native habitats, non-native plant species have been accidentally or intentionally introduced. Some of these introduced plants have been designated as noxious weeds. In King County, there are currently over 150 noxious weeds that have been identified by the King County Noxious Weed Control Board, 88 of which are regulated as Class A, B, or C noxious weeds that require eradication or control within the county.⁸⁴

Native habitats and disturbed areas are at risk from noxious weeds and non-native species that colonize these areas, making these areas potentially more susceptible to the effects of climate change. For example, wildfires can create habitats with decreased water retention and monolithic habitats, which can result in reduced ecosystem functions for the support of healthy plant and wildlife communities. The King County Noxious Weed Board adopts a county weed list annually, provides public education and resource assistance to control or eradicate noxious weeds, and surveys roadways and conservation lands to help eradicate and manage the spread of noxious weeds in the county.

3.3.3 Environmental Consequences

3.3.3.1 No Action Alternative

Under the No Action Alternative, King County would retain the Current Plan's policies and initiatives, such as the Fish Passage Restoration Program, 2020 SCAP, and WRIA watershed and salmon recovery plans. These programs and policies work in conjunction and seek to improve, restore, and protect wildlife and vegetation habitats and maintain biodiversity to support healthy ecosystems through ongoing fish passage restoration work; protect riparian, streams, wetlands, and species and habitats of importance; restore habitat and floodplains; and retain healthy forests as carbon sinks to prepare for climate change. Anticipated development patterns would align with the existing allowed uses and development standards within each zoning district.

While the 2022 Comprehensive Plan Performance Measures Report does not evaluate specific performance measures for wildlife and habitat, it does evaluate the County's performance in protecting open space and reducing greenhouse gases, both of which contribute to the health of plant and animal species. The County has been successful in increasing the area of permanently protected priority non-resource open space lands, although it has not been able to meet its targets for reducing greenhouse gas emissions. Impacts from climate change would continue to have wide-ranging impacts on the natural environment, including severe weather events such as heat waves, winter storms, and summer droughts; decreased water supplies for fish; and changes to habitat and species distribution. Other existing trends, such as increased urbanization and development and the spread of invasive species, would also continue to impact biodiversity in the county. In the county of the species of the county of the

⁸⁴ King County, 2023 King County Noxious Weed List, 2023. [LINK]

⁸⁵ King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

⁸⁶ King County, Threats to Biodiversity in King County, 2023. [LINK]

3.3.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Changes under both action alternatives that may affect wildlife and habitat include proposals that support renewable energy and electric vehicle use, clearing vegetation that supports wildfire planning, updating critical areas regulations, planning for fish habitat and floodplain restoration activities in APDs, and allowing new or expanded uses on resource lands, such as materials processing, mineral extraction, or other industrial uses. The action alternatives are not anticipated to result in significant adverse impacts to wildlife or habitat.

Both action alternatives would advance the County's climate change strategy to encourage and incentivize electric vehicle use and promote electric vehicle infrastructure to help reduce greenhouse gas emissions. The construction of charging station infrastructure may require more land development in the Rural Area or on Natural Resource Lands; however, regulations and policies already in place would help mitigate any additional development in these areas. Potential local wildlife species of importance and important wetland habitats would remain protected in these areas.

Updates to the County's critical areas regulations under both action alternatives would likely promote biodiversity and habitats with important ecological functions in the county and protect wetland and stream areas. The critical area regulations define buffers and require mitigation measures for development near wetlands, lakes, wildlife habitat, and streams and areas at risk for erosion, landslides, and flooding located in unincorporated areas of King County. They would remain in place under both action alternatives.

Proposals that encourage removing fish barriers and improve fish habitat and floodplain restoration planning would help protect endangered salmon populations, which could increase food production for endangered orcas beyond the No Action Alternative. Changes related to fish and habitat restoration would be implemented in conjunction with agricultural production goals to protect remaining farmlands for food production in APDs while reducing flood risk for farms.

Comparison of Action Alternatives

The main difference between the action alternatives is how aggressively they pursue changes that can support progress towards the 2024 Update objectives. While the Limited Change Alternative encourages policies and actions to reduce greenhouse gas emissions and supports electric vehicle use and supporting infrastructure, the Extensive Change Alternative requires greenhouse gas reduction and the construction of electric vehicle charging stations in geographically dispersed and equitable areas in the Urban Area and Rural Area. The Extensive Change Alternative also requires providing electric vehicle infrastructure at multiplexes (including duplexes, triplexes, and fourplexes). More population in these multiplex buildings may result in more electric vehicles present that need chargers to support them. As a result, more land may be needed to build wind, solar, and battery facilities to charge electric vehicles under the Extensive Change Alternative, which could have a greater impact to wildlife and habitat in the Rural Area and on Natural Resource Lands.

Another difference between the action alternatives is in the rate of fish habitat restoration and fish culvert mitigation in and around unincorporated King County and specifically within ADPs. The Limited Change Alternative supports balancing agricultural production, fish habitat, and floodplain restoration projects in the Snoqualmie Valley APD, as recommended by the Fish, Farm, Flood Advisory Committee. The Extensive Change Alternative would require fish and floodplain habitat restoration projects to balance against agricultural production goals throughout all APDs. Potential benefits and impacts would

be site-specific, as some areas or projects would prioritize expansion of commercial agriculture operations, and others would prioritize salmon habitat restoration.

The Limited Change Alternative would encourage making minor updates to the County's critical area codes; this may include clarifying changes, using updated terminology, and reflecting changes to state law. The Extensive Change Alternative would make substantive updates, such as requiring larger buffers around wetlands, aquatic, and riparian areas, based on current, best available scientific findings to protect fish, wildlife, and plant communities. Because the Extensive Change Alternative would be more restrictive to development projects than the Limited Change Alternative, it would have better protections for wildlife and habitat, thus reducing the impact.

3.3.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to wildlife or habitat are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts on wildlife and habitat.

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3.4 Natural Resources

This section discusses natural resources in King County, including agriculture, forest lands, and mineral resources, and evaluates potential impacts to these resources that may be associated with the 2024 Update alternatives.

3.4.1 Existing Policy and Regulatory Framework

Some of the primary laws, regulations, and policies guiding natural resources in unincorporated King County include the following:

- Chapter 78.44 RCW, Surface Mining, and Chapter 332-18 WAC, Surface Mine Reclamation, which govern the extraction of minerals through surface mining and the reclamation of mined lands.
- Chapter 78.56 RCW, Metals Mining and Milling Operations, which regulates the design, construction, and operation of mining or milling operations.
- K.C.C. Chapter 21A.30, Livestock Management Ordinance, which is intended to support the
 raising and keeping of livestock in a way that minimizes the adverse impacts of livestock on the
 environment, particularly related to their impacts on water quality and salmonid fisheries
 habitat in King County watersheds.
- K.C.C Chapter 76.09, Forest Practices, which governs all forest practices in non-federal lands.
- K.C.C. Chapter 21A.37, King County Transfer of Development Rights (TDR) Program, which is a voluntary, incentive-based, and market-driven approach to preserve the Rural Area and Natural Resource Lands by directing growth into King County's Urban Area.
- 2021 King County CPPs, which include policies to promote and support forestry, agriculture, and mineral extraction, to protect the natural resources related to those uses, and other related policies.
- Farmland Preservation Program, which is a voluntary program that is intended to preserve
 farmland by purchasing the right to develop it, restricting the property to agriculture or open
 space uses, limiting the number of residences permitted, and imposing other limitations on the
 property.

3.4.2 Affected Environment

King County natural resources include agricultural lands for food production, forest lands for recreation and timber production, and lands for mineral extraction. In addition to implementing policies and regulations to manage privately owned agricultural, forest, and mineral resource lands, the County also manages more than 14,000 acres of natural and working resource lands through its Natural Resources Land Program in the Department of Natural Resources and Parks (DNRP).⁸⁷ These lands include historic farmlands, working forest lands, and protected riparian ecosystems.

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⁸⁷ King County, Natural Resource Lands, 2022. [LINK]

Lands managed by the Natural Resource Lands Program are divided into two categories: ecological lands and working resource lands. Ecological lands are intended to protect valuable ecological systems to preserve native habitat and biodiversity, and are discussed in Section 3.3, Wildlife and Habitat. This section focuses on the working resource lands, which includes farmland and forestland that generate farm or forest products as part of a commercial enterprise.

3.4.2.1 Agriculture

King County includes approximately 48,000 acres of farmland, half of which produce food. Over 41,000 acres of land are included in APDs and over 15,000 acres of farmland are permanently protected through the Farmland Preservation Program (shown in Figure 3.4-1, Protected Farmlands). Ring County APDs identify areas where agriculture is the predominant land use, with the understanding that those areas also provide critically important salmon habitat and are subject to natural floodplain processes. The Farmland Preservation Program allows King County to purchase development rights to properties to preserve high quality farmland.

King County has five APDs: Sammamish River, Snoqualmie River, Lower Green River, Upper Green River, and Enumclaw Plateau. Most farmable lands are located within APDs and the Rural Area. ⁸⁹ Within APDs, approximately 27,000 acres (65 percent) are considered farmable, and the remaining 14,000 acres are not farmable, including forests, developed areas, and waterbodies. Of the farmable lands, approximately 25,000 acres (93 percent) are in production. Table 3.4-1, Agricultural Land Uses by Agricultural Production District, lists the acreage of each APD, as well as the types of agricultural land uses.

⁸⁸ King County, Agriculture in King County, Washington, 2022. [LINK]

⁸⁹ Cedar River Group, Recommendations of the King County Farms and Food Roundtable, June 2014. [LINK]

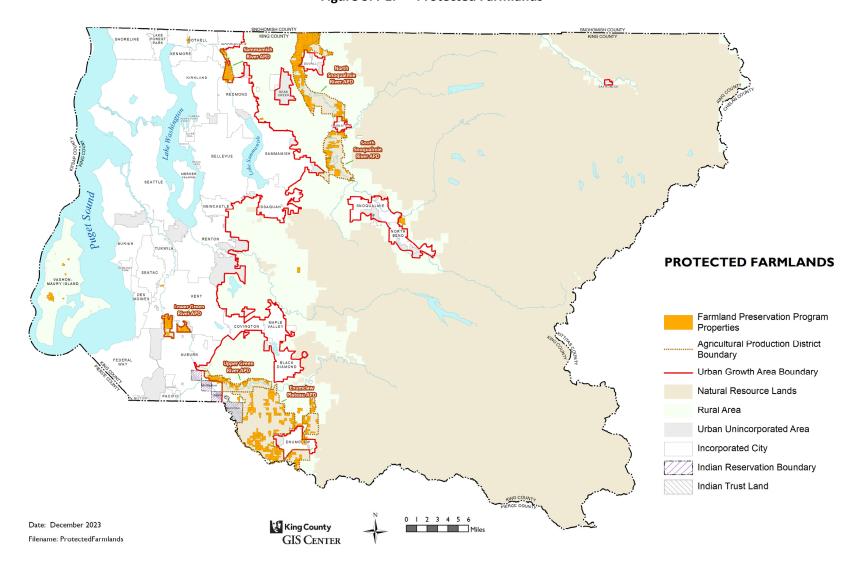


Figure 3.4-1. Protected Farmlands

Table 3.4-1. Agricultural Land Uses by Agricultural	Production District
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APD Name	Acreage ^a	Agricultural Land Uses	
Enumclaw APD	20,680	Livestock/forage, equestrian facilities, grassland/managed field, produce/market crops	
Lower Green River APD	1,460	Livestock/forage, nursery, orchard, produce/market crops	
Upper Green River APD	3,420	Livestock/forage, equestrian facilities, produce/market crops, nursery, tre farms	
Sammamish APD	1,090	Produce/market crops, sod farms, tree farms, nursery	
Snoqualmie APD	14,780	Livestock/forage, equestrian facilities, produce/market crops, nursery, orchard, grassland/managed field	

Source: King County, GIS Open Data – Agricultural Production Districts, 2023. [LINK]

There are approximately 1,800 farms in King County and total annual farm sales exceed \$135 million. The county supports many different types of commercial farm operations including both crops (e.g., fruits, vegetables, grains, herbs, flowers, sod, Christmas trees) and livestock products (e.g., meat, dairy, eggs, other animal products). Of the agricultural goods produced in King County, approximately 70 percent of products sold are crops, and the remaining 30 percent are livestock and animal products. The top three crops by area are forage (70 percent), corn (13 percent), and vegetables (10 percent). Additionally, nearly all fruits and vegetables grown in King County are sold to the fresh market locally. In 2022, there were 39 farmers markets in operation in King County, which generated nearly \$35 million in sales and were visited by 1.8 million shoppers. The county are sold to the fresh market locally in sales and were visited by 1.8 million shoppers.

3.4.2.2 Forest Lands

The forests in King County provide cover to cool streams and urban areas, enhance salmon and other wildlife habitat, provide wood and non-timber products, provide recreational opportunities, improve air and water quality, reduce stormwater runoff, provide scenic views to enhance quality of life, and provide cultural resources and support cultural heritage. Approximately 60 percent of the entire county (811,000 acres) is covered by forests (Figure 3.4-2, Forest Cover and Distribution).

Forest cover is most dense along the foothills of and within the Cascade Mountains and on Vashon-Maury Island. Overall, 74 percent of the forested land in King County is evergreen forest, 6 percent is deciduous forest, and 20 percent is mixed forest (dominated by both evergreen and deciduous tree species). 92 Tree cover in the urban areas of unincorporated King County varies depending on the intensity of development, as high as 46 percent in the community of Maplewood, and as low as 21 percent in the more intensely developed White Center neighborhood. 93 Between 1992 and 2016, forest cover held steady in rural King County (from 70 percent to 71 percent total cover) but declined from 37 percent to 29 percent total cover in urban unincorporated areas.

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^a Rounded to the nearest 10 acres.

⁹⁰ U.S. Department of Agriculture, 2017 Census of Agriculture County Profile: King County, 2017. [LINK]

⁹¹ King County, King County Farmers Markets: 2022, September 2023. [LINK]

⁹² King County, Wildfire Risk Reduction Strategy, July 2022. [LINK]

⁹³ King County, King County 30-Year Forest Plan, February 2021. [LINK]

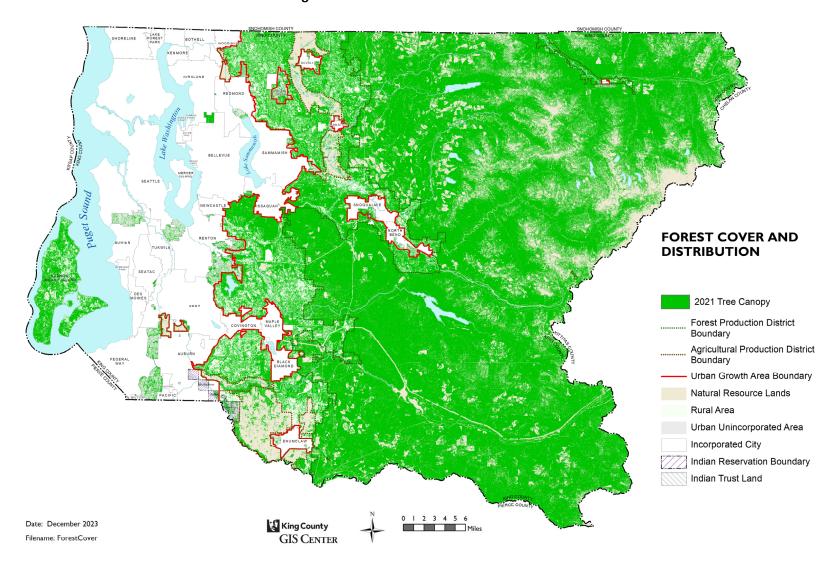


Figure 3.4-2. Forest Cover and Distribution

In 2020, a majority of forested areas (approximately 64 percent) were in public ownership, 32 percent of forestlands were privately owned, and 4 percent of forestlands were owned by Tribes. Https://doi.org/10.1001/j.com/10.100

Development is limited in Forest Production Districts (FPDs) to preserve large blocks of forest and in Rural Forest Focus Areas to provide a buffer between commercial forestland and adjacent residential development. The FPD was designated to preserve an intact forested landscape and a viable timber industry. Over 825,000 acres of land in King County are designated as FPD lands, which includes forested and non-forested lands, including waterbodies, roads, and lands that have been converted to other uses. Rural Forest Focus Areas are "mapped geographic areas where special efforts to maintain forest cover and the practice of sustainable forestry are warranted." There are 55,000 acres of Rural Forest Focus Areas in the county that are all located in the Rural Area. Of the 10 individual Rural Forest Focus Areas, the largest is Cedar River/Ravensdale (11,000 acres) and the smallest is Bear Creek (600 acres). Parcels located in Rural Forest Focus Areas are eligible sending sites for the TDR Program and may be granted bonus development rights.

Wildland Urban Interface

The WUI is the zone of transition between development and undeveloped land or vegetative fuels. ⁹⁹ For the most part, WUI areas are in unincorporated King County, though some are present in incorporated cities as well. The WUI in King County includes two primary wildfire zones: interface and intermix, as shown in Figure 3.4-3, Wildland Urban Interface. Interface areas are those in which development and structures are bordered by wildlands on at least one side. Intermix areas are defined as a development or structure that is surrounded on two or more sides by wildlands. Interface and intermix areas are spread throughout the populated areas of unincorporated King County, particularly in central King County and on Vashon-Maury Island, following the UGA boundary between incorporated cities and rural unincorporated King County and along major highways.

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⁹⁴ King County, King County Rural Forest Commission Strategic Priorities: Recommendations and Actions for Conservation of Forestland, February 2022. [LINK]

⁹⁵ King County, Forest Stewardship, 2023. [LINK]

⁹⁶ K.C.C. 21A.06.1014.

⁹⁷ King County, Rural Forest Focus Area of King County, 2019. [LINK]

⁹⁸ King County, Sending Site Information, 2023. [LINK]

⁹⁹ King County, 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

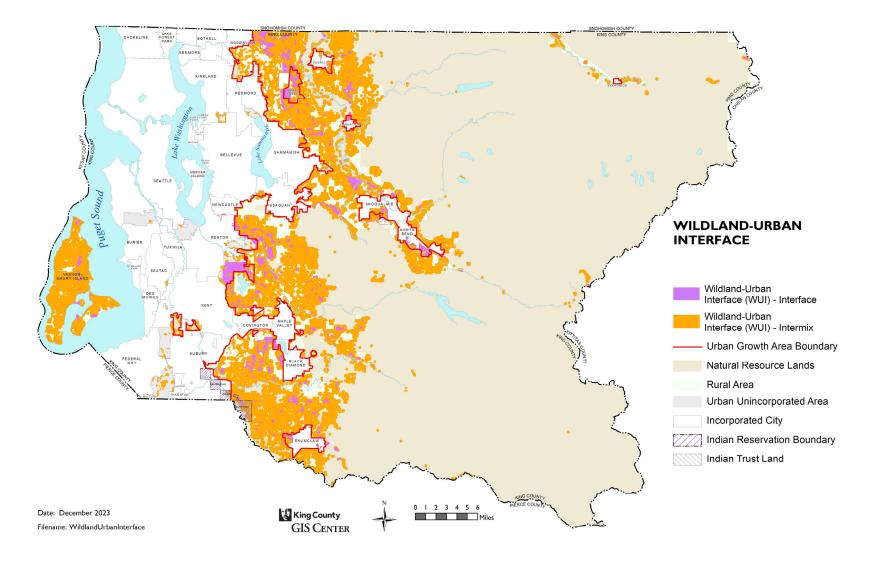


Figure 3.4-3. Wildland Urban Interface

3.4.2.3 Mineral, Oil, and Gas Resources

Currently, there are over 3,500 acres of zoned mineral lands within unincorporated King County, though not all of these are actively used for mining. The County identifies Designated Mineral Resource Sites, which are zoned for mining or are currently operating; Potential Surface Mineral Resources Sites, where the County may allow future surface mining; and Nonconforming Mineral Resource Sites, where mining operations predated King County zoning regulations. ¹⁰⁰ In addition, mineral extraction is allowed within the FPD and Forest zone.

Most of the Designated Mineral Resources Sites are sand and/or gravel. Figure 3.4-4, Mineral Resources, below shows mineral resource site locations, including designated, potential, and nonconforming sites. These sites are roughly within central King County between the FPD and the incorporated cities of Renton and Issaquah to the west; east of Enumclaw and Black Diamond in southern King County; between Maple Valley and Issaquah and around Snoqualmie and North Bend in central King County; and around Duvall in northern King County.

There are two coal fields, or areas of coal deposits, in King County: one near the town of Black Diamond and the other in the vicinity of Issaquah and Renton. Although there are no coal mines currently operating in the county, there are several locations that have been designated as hazard areas due to historic coal mining activity. Approximately 90 acres within the coal field boundaries have been designated as coal mine critical areas by K.C.C. Chapter 21A.24. Development of new coal mines, however, is prohibited within King County by K.C.C. 21A.08.090.

Currently, there is no active oil or natural gas production in Washington, and development of new oil and gas extraction sites is also prohibited within unincorporated King County by K.C.C. 21A.08.090.¹⁰¹

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¹⁰⁰ King County, 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

¹⁰¹ Washington Department of Natural Resources, Oil and Gas Resources, 2022. [LINK]

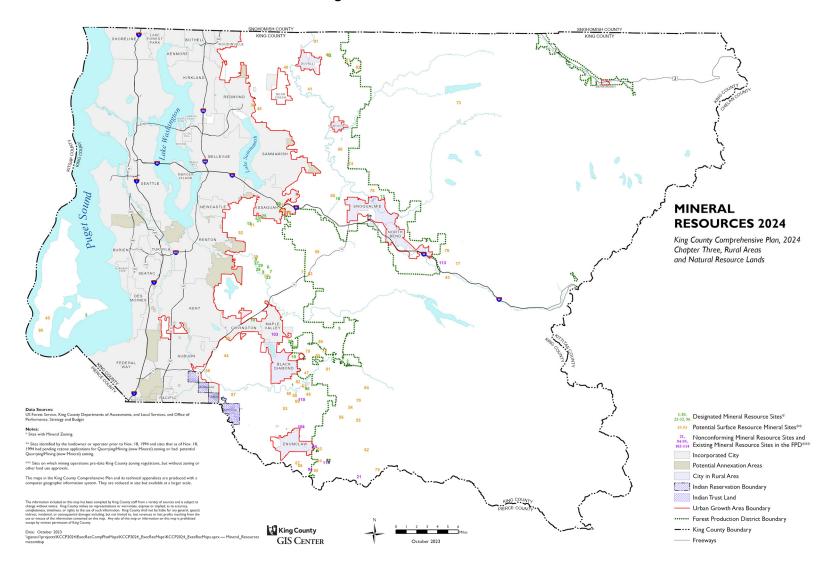


Figure 3.4-4. Mineral Resources

3.4.3 Environmental Consequences

3.4.3.1 No Action Alternative

Under the No Action Alternative, King County would continue to implement and administer current regulations, policies, programs, and partnerships to sustain agricultural, forestry, and mining practices in the county. For example, regulations concerning land use and development within APDs and the FPD would continue to protect agricultural and forest resources respectively, and the County's TDR Program would continue to direct development away from the Rural Area and on Natural Resource Lands.

According to the 2022 Comprehensive Plan Performance Measures Report, the acreage of both designated farm and forest lands have increased in the last decade under existing agricultural and forest zoning and programs directed toward preserving farmland, keeping existing farmland in agricultural use, and expanding farmland in active production. ¹⁰² Under the No Action Alternative, this trend is expected to continue; however, population and job growth within unincorporated King County could add pressure to develop farm, forest, and mineral lands not protected under existing laws, particularly within the Rural Area. This pressure could lead to designation changes that result in a reduction of farmland through conversion of these lands to residential or other uses.

3.4.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

The action alternative proposals that would affect natural resources include those that modify program requirements for the TDR program (described further in Section 4.2, Land Use and Aesthetics); promote the use of renewable energy; support wildfire management within the WUI; support implementation of the Fish, Farm, Flood recommendations; protect and promote both small hobby farms and larger commercial farms in the Rural Areas and on agricultural lands; encourage active production of farmland in agricultural zones and APDs; and allow new or expanded uses on resource lands, such as materials processing, mineral extraction, or other industrial uses.

The action alternatives would generally result in benefits to natural resources by increasing efforts to preserve agricultural, forest, and mineral resource lands. However, the action alternatives do include some proposals that would allow, promote, or cause changes to land uses within Natural Resource Lands, which could result in some adverse impacts. However, these impacts are not anticipated to be significant.

Agriculture

The action alternatives include several proposals to protect and promote farming activity through incentives or requirements to promote small farms, restrict non-agricultural uses on farmland, and for farmland to be in active production in the Agricultural zone. Other proposals would seek to implement the Fish, Farm, Flood Advisory Committee recommendations for balancing farming activities with fish habitat restoration projects and floodplain management, which could reduce the risk of floods while improving agricultural productivity.

Proposals that encourage the growth of renewable energy could result in the use of the Rural Area or Natural Resource Lands being used for solar or wind farms rather than agricultural uses. Similarly, proposals that would expand allowable uses in the Rural Area or on Natural Resource Lands, such as for

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¹⁰² King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

materials processing, or convert Natural Resource Lands to industrial zoning, could also result in a loss of farmable lands.

Forest Lands

Most of the proposals included in the action alternatives would not affect forest lands. However, proposals that would allow for the expansion of existing uses or new uses within the Forest zone, such as resorts or material processing, or that would convert Natural Resource Lands to industrial zoning, could result in the reduction of forest land or adverse impacts to the ecological health of forest land. Proposals that could benefit forest lands include those that support the creation and retention of old growth corridors by providing landowner incentives or restricting development. Additionally, updates to the TDR Program, which provide bonus points for sending sites in the Forest zone, could encourage the protection of more forest lands.

Wildland Urban Interface

Both action alternatives include proposals to increase awareness of and manage wildfire risk, which would protect populations living in and near the WUI areas, as well as the ecological health of the WUI environment. For example, both action alternatives would expand allowances for clearing of trees and vegetation around habitable structures and utilities, which could lead to a reduction in plant cover; however, this reduction is negligible when compared to potential vegetation loss in the event of a wildfire.

Mineral, Oil, and Gas Resources

Both action alternatives include proposals that would make changes to the development conditions for mineral resource extraction operations, to materials processing allowances on Mineral zoned land within the Rural Area and on Natural Resource Lands, and to standards for the conversion of reclaimed mineral extraction sites for future use as green energy facilities. These proposals could expand mineral resource extraction activities in some areas.

Comparison of Action Alternatives

The primary difference between the action alternatives is the extent and geography to which they would implement the 2024 Update proposals related to agriculture, forest lands, and mineral resources. As described previously, both action alternatives would result in overall benefits to Natural Resource Lands. The Extensive Change Alternative would likely result in a greater degree of protection of Natural Resource Lands, particularly agricultural lands, than the Limited Change Alternative.

Under the Limited Change Alternative, the Fish, Farm, Flood Advisory Committee recommendations would be implemented in the Snoqualmie Valley APD, while the Extensive Change Alternative would implement the recommendations in all APDs. Implementation of these recommendations is anticipated to result in a greater benefit for farming interests, salmon recovery, and flood risk reduction, though individual actions would need to be tailored to each APD since the recommendations were developed specifically for the Snoqualmie APD.

Although an overall benefit to Natural Resource Lands is anticipated, some conversion of Natural Resource Lands is possible. The Extensive Change Alternative would potentially cause a greater loss or conversion of Natural Resource Lands than the Limited Change Alternative. For example, by requiring the use of renewable energy and the phasing out of fossil fuels, the Extensive Change Alternative would help drive the need for alternative sources of energy, such as solar or wind farms, which would likely be constructed on less developed Rural Area or Natural Resource Lands locations. However, there are existing efforts at the county, regional, and state level to increase the use of renewable energy (see Sections 3.1, Air Quality and

Greenhouse Gas Emissions, and 4.1, Utilities and Public Services), which is already encouraging the development of alternative sources of energy in the Rural Area and on Natural Resource Lands.

Other Extensive Change Alternative proposals would allow, in limited circumstances, the conversion of Natural Resource Lands to industrial zoning. The Limited Change Alternative, in contrast, would only make minor adjustments to the regulations or development conditions. It would restrict the conversion to industrial zoning to those areas where there are existing or historical intensive uses, which would lessen the impact of a new industrial use. As a result, the Limited Change Alternative would be less likely to convert Natural Resource Lands or impact the ecological health of the natural resource area.

3.4.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to natural resources are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to agricultural, forest, and mineral resource lands.

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4. BUILT ENVIRONMENT – EXISTING POLICY AND REGULATORY FRAMEWORK, AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES

As required by SEPA (WAC 197-11-440), this chapter, like Chapter 3, summarizes the existing policy and regulatory framework and affected environment and describes the environmental consequences and mitigation measures related to the following elements of the built environment: Utilities and Public Services; Land Use and Aesthetics; Housing; Parks, Open Space, and Recreation; Historic and Cultural Resources; Transportation; and Socioeconomics and Environmental Justice. The discussion of each of the elements is divided further into subsections, outlined below.

Existing Policy and Regulatory Framework:

This subsection identifies and briefly summarizes the relevant federal, state, and local guidance documents, including laws, plans, policies, rules, and regulations for the elements of the environment.

Affected Environment:

This subsection introduces the study area for the element of the environment and briefly summarizes the existing environmental setting, physical conditions, and current trends that would be affected by the alternatives. For most elements of the environment, the study area consists of unincorporated King County, which is the area governed by the Comprehensive Plan. Except where otherwise noted, maps and figures show relevant information only within the study area for each element of the environment.¹⁰³

Environmental Consequences:

This subsection describes the analysis of potential impacts of the alternatives on the affected environment for the 20-year planning period. Impacts associated with the No Action Alternative are discussed first. These are impacts that would occur if King County continued to operate according to the Current Plan. Next, impacts common to both action alternatives—the Limited Change Alternative and the Extensive Change Alternative—are discussed together, followed by a comparison of impacts between the two action alternatives.

Avoidance, Minimization, and Mitigation Measures:

If potential significant adverse impacts are identified, this subsection would identify appropriate mitigation measures to avoid, minimize, or mitigate environmental impacts beyond those included as features of the action alternatives. Mitigation measures (inclusive of avoidance and minimization) are designed to offset the impacts of the action alternatives on the affected environment for each discipline.

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¹⁰³ The information included on the maps in this chapter has been compiled by King County staff from a variety of sources and are subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on these maps. Any sale of these maps or information on these maps is prohibited except by written permission of King County.

4.1 Utilities and Public Services

This section discusses utilities and public services in King County, such as water supply, wastewater, solid waste, telecommunications, emergency services, and schools, and it evaluates potential impacts to these resources that may be associated with the 2024 Update alternatives.

4.1.1 Existing Policy and Regulatory Framework

Utilities

Some of the laws, regulations, and policies guiding utilities in unincorporated King County include the following:

- Chapter 70A.100 RCW, Public Water Systems Coordination Act of 1977, which guides water utility planning and development.
- Chapters 70A.120 through 70A.140 RCW, which govern public water systems and water quality.
- Chapters 290 through 296 WAC, Water Systems, which implements regulations related to public water supply.
- K.C.C. Title 9, Surface Water Management, which provides for the comprehensive management
 of stormwater runoff and surface water and erosion control, including programs to reduce
 flooding, erosion, and sedimentation; prevent and mitigate habitat loss; enhance groundwater
 recharge; and prevent water quality degradation through the implementation of comprehensive
 and thorough permit review, construction inspection, enforcement, and maintenance.
- K.C.C. Title 10, Solid Waste, which regulates solid waste in King County, including solid waste sites, waste reduction, and construction and demolition waste.
- K.C.C. Title 13, Water and Sewer Systems, which sets out County rules for water and sewer systems.
- King County Board of Health Code Title 12, Water, which outlines rules and regulations for King County public drinking water systems.
- 2021 King County CPPs, which establish the framework for developing comprehensive plans, including the services, facilities, and utilities element.
- King County Regional Wastewater Services Plan (Ordinance 13680), which is a planning
 document intended to ensure the continuation of high-quality wastewater treatment services
 throughout King County and includes a proposal for a new treatment plant, conveyance system
 improvements, regional infiltration and inflow control, combined sewer overflow control, odor
 control, loop biosolids recycling, and expanded water reuse.

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Public Services

Some of the laws, regulations, and policies guiding public services in unincorporated King County include the following:

- RCW 9.46.210, which governs enforcement and commissioning by law enforcement agencies.
- Title 28A RCW, Common School Provisions, which governs school provisions, including but not limited to school facilities, school programs, student attendance, health, learning assistance, school and district funding, and teaching standards and regulations.
- RCW 36.32.470, which governs fire protection, ambulance, and other emergency services provided by municipal corporations within the county.
- Chapter 43.70 RCW, Department of Health, which governs the department of health, including services provided, licenses, fines, and funding.
- Title 52 RCW, Fire Protection Districts, which provides for formation of fire protection districts, including the formation of regional fire protection authorities whose boundaries are coextensive with two or more adjacent fire protection jurisdictions.

4.1.2 Affected Environment

The study area for utilities and public services is generally King County as a whole. Where possible, data is reported for just unincorporated King County.

4.1.2.1 Utilities

Water Supply

Approximately 2,000 public water systems serve residential, commercial, and industrial development within King County countywide. These public water systems are regulated based on the number of connections and future system growth expectations. The majority of public water systems, (approximately 1,680) are Group B systems, which have between two and 14 water service connections. Of the 149 Group A systems, which have 15 or greater connections, 43 water systems serve more than 1,000 water connections. While these systems are referred to as "public" water systems, the ownership type includes associations, investor, cities, private, and special districts. ¹⁰⁴ See Table 3.4-1, Public Water Systems with More Than 1,000 Connections, below.

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¹⁰⁴ Washington State Department of Health, Environmental Health Division, Office of Drinking Water, Sentry Database, 2023. [LINK]

Table 4.1-1. Public Water Systems with More Than 1,000 Connections

Cities	Algona	Kirkland		
	Auburn	Mercer Island		
	Bellevue	North Bend		
	Black Diamond	Pacific		
	Bothell	Redmond		
	Carnation	Renton		
	Duvall	Seattle		
	Enumclaw	Snoqualmie		
	Issaquah	Tukwila		
	Kent			
Special Districts	Cedar River Water & Sewer District	King County Water District No. 125		
	Coal Creek Utility District	Lake Meridian Water District		
	Covington Water District	Lakehaven Water And Sewer District		
	Fall City Water District #127	NE Sammamish Sewer & Water District		
	Highline Water District	North City Water District		
	King County Water District No. 19	Northshore Utility District		
	King County Water District No. 20	Sammamish Plateau Water & Sewer		
	King County Water District No. 49	Skyway Water & Sewer		
	King County Water District No. 54	Soos Creek Water & Sewer District		
	King County Water District No 90	Woodinville Water District		
	King County Water District No. 119			
Associations	Ames Lake Water Association			
	Sallal Water Association			
	Union Hill Water Association			

It is estimated the 32 largest water utilities in the county serve roughly 94 percent of its population. Seattle Public Utilities (SPU) is the primary water supplier in the county, as it provides water to approximately 80 percent of the county's population, either through direct service connections or wholesale customers. Consequently, the majority the county water supply currently originates from two SPU surface water reservoirs: the Cedar River and the South Fork Tolt River. SPU estimates the Cedar River system supplies between 60 and 70 percent of the water, and the South Fork Tolt River typically supplies the remaining water used by its direct customers or conveyed to its wholesale customers. SPU has two groundwater wells as backup supply sources for peak season usage and in emergency situations. ¹⁰⁵

The Cascade Water Alliance (Cascade) is an organization comprised of five cities and two water and sewer districts. Through Cascade, participating water purveyors receive wholesale water through SPU in addition to local water sources. Cascade owns Lake Tapps as a future municipal drinking water supply. It is anticipated Lake Tapps may be needed as a water supply source in the 2030s or 2040s. Cascade also pursues water conservation efforts for its member water purveyors. ¹⁰⁶

¹⁰⁵ SPU, 2021 Annual Survey of Wholesale Customers: Summary of Results Consumption Data for 2020 – Rates for 2021, October 2021. [LINK]

¹⁰⁶ Cascade Water Alliance, Homepage, accessed November 6, 2023. [LINK]

King County has approved Coordinated Water System Plans (CWSPs) to coordinate water services within the County. The CWSPs encompass the four designated critical water supply service areas in King County: East King County, South King County, Skyway, and Vashon (Figure 4.1-1, Water Utility Service Planning Areas). Critical water supply service areas are managed by the King County CWSPs for each area, as established by Chapter 70A.100 RCW and K.C.C. Chapter 13.28. The CWSPs are intended to coordinate the planning and development of water facilities and service. The procedures in the planning documents provide guidelines for providing future water service in the most efficient manner with the objectives of coordinating development by geographical area and integrating water system development with future land use plans. The CWSPs strive to assure that an adequate supply of water is available for residential, commercial, and industrial uses within the service areas and establish minimum design and planning standards.

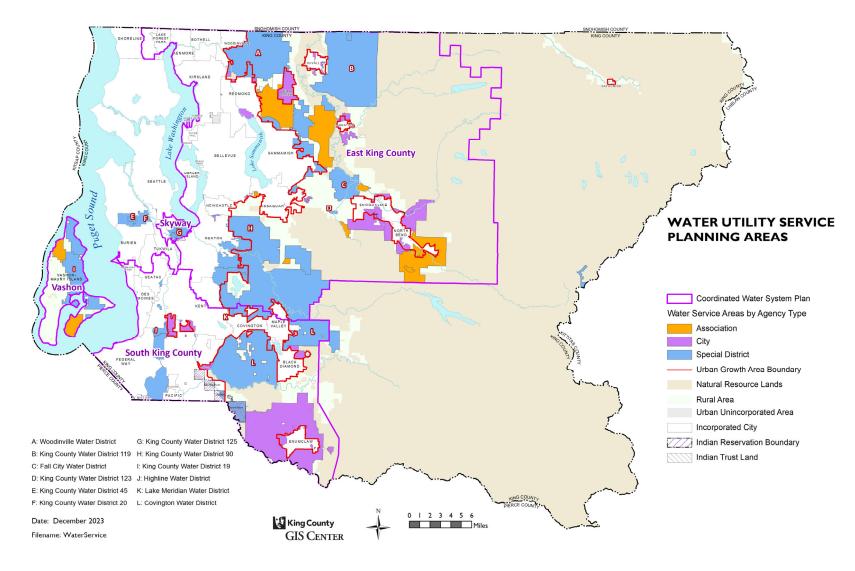


Figure 4.1-1. Water Utility Service Planning Areas

Stormwater and Wastewater

King County manages stormwater to comply with its National Pollution Discharge Elimination System Phase 1 Permit, as described in its Stormwater Management Program Plan. Phase 1 permits regulate discharge from municipal separate storm sewer systems owned and operated by Washington's largest cities and counties and require local governments to manage and control stormwater to prevent polluting downstream waters.

The County maintains a variety of stormwater facilities throughout unincorporated King County in roadway rights-of-way, on County-owned tracts, and within residential subdivisions. These include flow control facilities, such as detention ponds, infiltration ponds, and underground vaults, and water quality facilities, such as oil-water separators, sand filters, constructed stormwater ponds, and wetlands. Facilities in private developments, including multifamily and commercial developments, are typically privately owned and maintained.

The King County DNRP Wastewater Treatment Division provides wastewater treatment services to about 1.9 million residents over 424 square miles. This service area includes the Muckleshoot Indian Tribe, 18 cities, and 15 local sewer utilities throughout King, Snohomish, and Pierce counties. ¹⁰⁷ The County collects wastewater from local agencies which own and operate independent collection systems, including pipelines and pump stations, and transports wastewater to King County's regional systems for treatment and disposal. Regional facilities include infrastructure like pipelines, pump stations, and treatment plants. Figure 4.1-2, Regional Wastewater System and Facilities, shows these facilities including Brightwater near Woodinville, South Plant in Renton, West Point in Seattle, and two small treatment plants on Vashon-Maury Island and in Carnation. Collectively, these treatment plants treat an average of 185 million gallons per day of sewage, with a peak day flow of 720 million gallons per day.

There are over 85,000 on-site sewage systems throughout the county that treat wastewater from homes and buildings not connected to a public sewer system. These systems are concentrated throughout residential areas on Vashon-Maury Island, within incorporated cities, and within the Urban Area and Rural Area of unincorporated King County. 109

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¹⁰⁷ King County, Facts about the King County Regional Wastewater System, 2022. [LINK]

¹⁰⁸ Ibid.

¹⁰⁹ King County, Current Status of On-site Sewage Systems in King County: Location, Age, and Failure Mapping Project, 2019. [LINK]

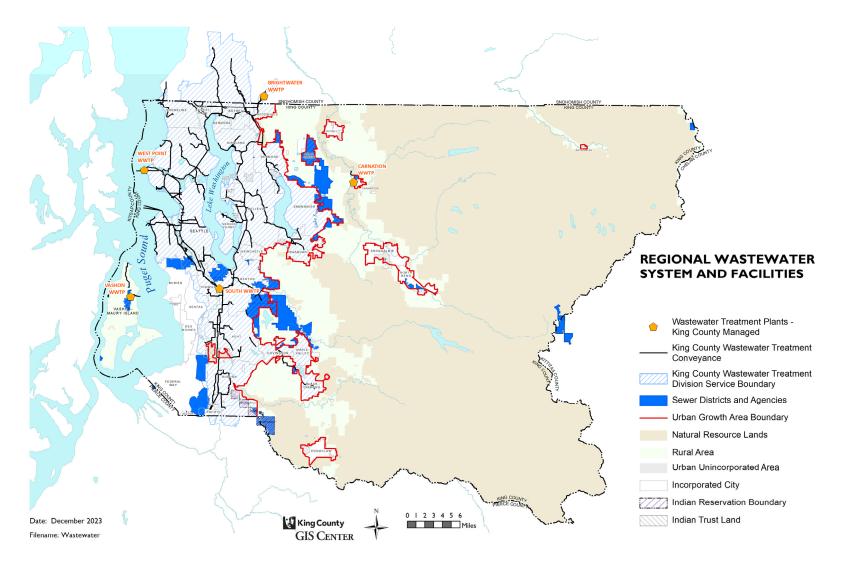


Figure 4.1-2. Regional Wastewater System and Facilities

Solid Waste and Recycling

The King County DNRP Solid Waste Division operates the Cedar Hills Regional Landfill, which serves about 70 percent of the county's population and is located in the Rural Area east of Renton. The landfill is 920 acres and in 2021 accepted 869,150 tons of mixed municipal solid waste received from residential and nonresidential sources. The Solid Waste Division also maintains several closed landfills throughout the county and offers garbage and recycling services for King County residents at transfer stations and drop boxes located in Algona, Bow Lake, Cedar Falls, Enumclaw, Factoria, Houghton, Renton, Skykomish, Shoreline, and Vashon.

Garbage collection in unincorporated King County is performed by private service providers, except in Enumclaw and Skykomish, which provide municipally managed garbage collection. Most of the collection services in unincorporated areas are provided by two companies, Waste Management, Inc. and Republic Services, and their subsidiaries. Recology and Waste Connections operate in Shoreline and on Vashon-Maury Island, respectively.

Electricity and Natural Gas

Puget Sound Energy provides electricity to most of King County and provides natural gas to areas within the county, as shown on Figure 4.1-3, Puget Sound Energy Service Area. Seattle City Light provides electricity to areas of unincorporated King County between the Seattle city limits, Burien, and Renton. Seattle City Light and Puget Sound Energy both use a mix of energy sources, including hydropower produced at hydroelectric facilities on the Cedar, Snoqualmie, and South Fork Tolt rivers in eastern King County and from hydroelectric facilities outside the county. They also use wind, solar, natural gas, and coal power purchased from other suppliers.¹¹¹

Other public renewable energy sources in King County include natural gas and electricity from wastewater treatment plants and landfill gas. The South and West Point treatment plants both capture biogas from wastewater treatment processes, which can be used to produce heat or electricity within the facility or sold the community. The South Treatment Plant purifies renewable natural gas and sells it back to local energy utilities for use in buildings and homes. The West Point Treatment Plant uses cogeneration systems to produce electricity, which is sold to Seattle City Light. Additionally, the Cedar Hills Regional Landfill utilizes a system of pipes to collect and route landfill gas to Bio Energy Washington to generate renewable energy. There are no commercial wind or solar energy production sites located within King County.

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¹¹⁰ King County, Cedar Hills Regional Landfill Fact Sheet, May 2022. [LINK]

¹¹¹ Seattle City Light, Power Supply and Delivery, 2023. [LINK]; Puget Sound Energy, Hydroelectric Projects, 2023. [LINK]

¹¹² King County, Renewable Energy, 2023. [LINK]

¹¹³ King County, Cedar Hills Regional Landfill Fact Sheet, May 2022. [LINK]

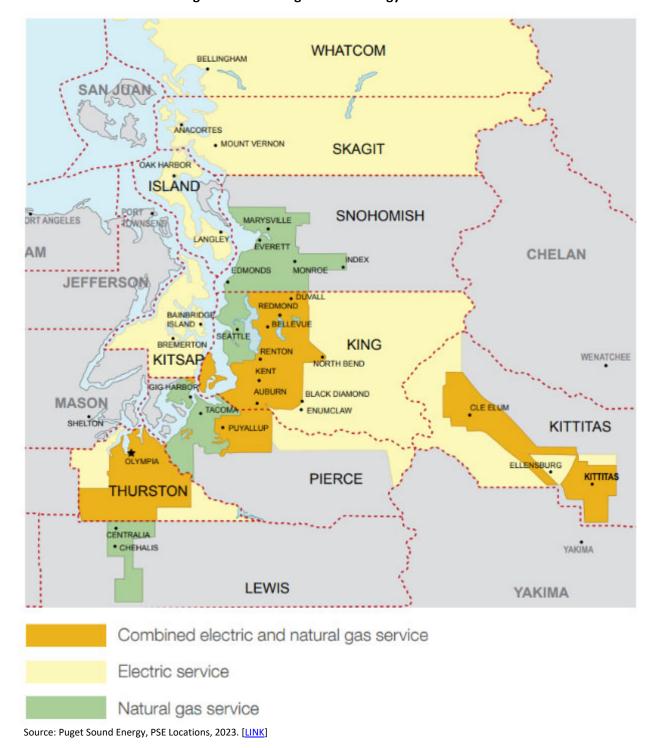


Figure 4.1-3. Puget Sound Energy Service Area

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Telecommunications

Cable and telecommunications are provided by private utilities in unincorporated King County. King County has signed franchise agreements with two cable companies, Comcast and Astound (WAVE) Broadband. These cable companies, along with CenturyLink, also provide internet to most parts of King County. AT&T, T-Mobile, and Verizon provide standard and cellular telephone services within King County. Areas without broadband internet access are limited to low-population areas across central King County, including along the I-90 corridor in eastern King County, and along the SR 2 corridor in northeastern King County. ¹¹⁴ Internet service is available in these areas, but not at broadband levels.

4.1.2.2 Public Services

Emergency Services

The King County Sheriff's Office (KCSO) consists of over 1,200 sworn and professional staff who provide law enforcement services to people in King County, including unincorporated areas. The KCSO includes three precincts: Precinct 2 services northeast King County, including Carnation, Sammamish, Skykomish, and Woodinville; Precinct 3 services southeast King County, including Beaux Arts Village, Covington, Maple Valley, Muckleshoot Tribe, and Newcastle; and Precinct 4 services portions of west King County, including Burien and Vashon-Maury Island.

KCSO also provides law enforcement services for King County Airport, King County Metro, Sound Transit, and partnering contract cities including Kenmore, SeaTac, and Shoreline. The locations of KCSO precincts and contract cities can be found in Figure 4.1-4, Sheriff Office Precincts and Contract Cities.

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¹¹⁴ King County, Broadband Access and Availability in King County, 2020. [LINK]

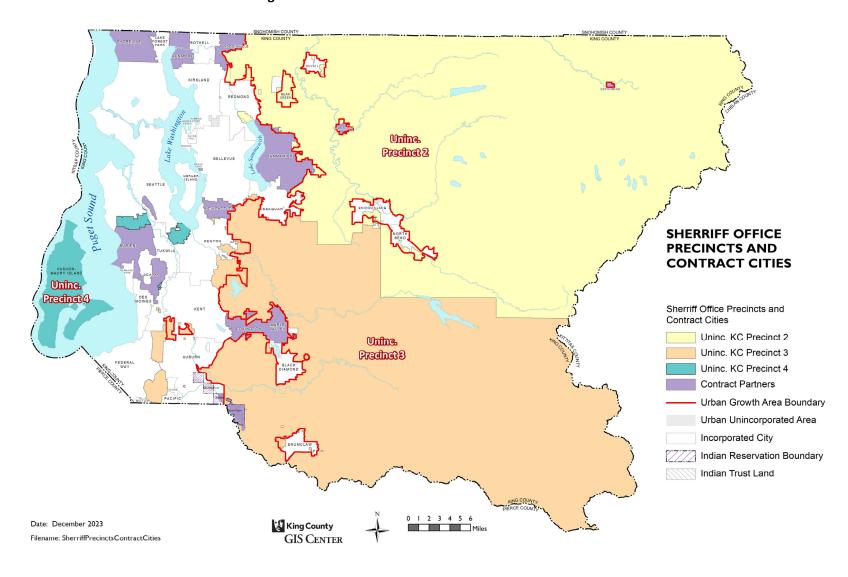


Figure 4.1-4. Sheriff Office Precincts and Contract Cities

Table 4.1-2, Violent and Property Crime in Unincorporated King County, lists information on violent and property crime rates for the KCSO jurisdiction and Washington state. Crime rates are provided from the FBI National Incident Based Reporting System, which provides statistics for violent crimes (e.g., murder, sexual assault, robbery, and aggravated assaults) and property crimes (e.g., burglary, theft, and arson). Crime rates for the KCSO's jurisdiction is lower than those for all of Washington state.

Table 4.1-2. Violent and Property Crime in Unincorporated King County

Jurisdiction	Violent and Property Crimes	Violent Crime Rate (per 1,000 population) ¹¹⁵	Property Crime Rate (per 1,000 population)
King County Sheriff's Office	4,377	1.6	10.6
Washington State	239,394	2.9	28.1

Source: Federal Bureau of Investigation, National Incident Based Reporting System, 2020. [LINK]

Note: The KCSO population for crime rates includes unincorporated King County and contract cities.

Fire protection is provided by fire protection districts, municipal fire departments, and regional fire authorities, encompassing both incorporated and unincorporated King County. Table 4.1-3, Fire Protection Providers and Service Areas in Unincorporated King County, lists the names of the fire protection districts, fire departments, and regional fire authorities in the county. Where available, the table includes personnel information, number of service calls, and population served. A map of fire service coverage is shown in Figure 4.1-5, Fire Protection Districts and Departments.

Table 4.1-3. Fire Protection Providers and Service Areas in Unincorporated King County

Name	No. of Firefighters	No. of Service Calls (approx.)	Population Served (incorporated and unincorporated residents)
Burien Fire	70 career	12,239	56,000
(Fire District No. 2 and 11 [contract])	12 volunteer		
Eastside Fire and Rescue	191 career	15,044	181,000
(Fire District No. 10, 38, and 36 [contract])	34 volunteer		
Enumclaw Fire Department	19 career	2,824	22,500
(Fire District No. 28)			
King County Fire Protection District No. 20	6 career	2,326	16,000
	25 volunteer		
King County Fire Protection District No. 27	Not available	Not available	Not available
King County Fire Protection District No. 45	25 career	Not available	Not available
King County Fire Protection District No. 47	24 volunteer	Not available	3,000
King County Fire Protection District No. 50	Not available,	Not available	Not available
	primarily volunteer		
Mountain View Fire and Rescue	35 career	2,483	32,000
(Fire District No. 44)	10 volunteer		
North Highline Fire District	24 career12 volunteer	Not available	19,000
(Fire District No. 11)			

¹¹⁵ Washington State Office of Financial Management (OFM), April 1, 2023, Population of Cities, Towns and Counties, 2023. [LINK]

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Table 4.1-3. Fire Protection Providers and Service Areas in Unincorporated King County (continued)

Name	No. of Firefighters	No. of Service Calls (approx.)	Population Served (incorporated and unincorporated residents)
Puget Sound Regional Fire Authority (Fire District No. 37 and No. 43)	345 career	36,042	230,265
King County Fire Protection District 34	Not available	Not available	23,000
Renton Regional Fire Authority (Fire District No. 25 and No. 40)	140 career	23,687	138,035
Snoqualmie Pass Fire and Rescue (Fire District No. 51)	3 career 22 volunteer	550	Not available
South King Fire (Fire District No. 39)	138	23,325	150,000
Valley Regional Fire (Fire District No. 31)	108 career	Not available	Not available
Vashon Island Fire and Rescue (Fire District No. 13)	13 career 8 volunteer	1,630	Variable: 11,000 year-round, up to 25,000 during summer tourism season

Sources: Eastside Fire and Rescue, 2022 Annual Report, 2022. [LINK]; Puget Sound Regional Fire Authority, About Puget Sound Fire, 2023. [LINK]; Renton Regional Fire Authority, 2022 Annual Report, 2022. [LINK]; Mountain View Fire and Rescue, About Us, 2023. [LINK]; South King Fire & Rescue, 2022 Operating and Capital Budgets, 2021. [LINK]; Snoqualmie Pass Fire and Rescue, About Us, 2023. [LINK]; Vashon Island Fire and Rescue, History, 2023. [LINK]; Shoreline Fire Department, About, 2023. [LINK]; Enumclaw Fire Department, Fast Facts, 2023. [LINK]; King County Fire Protection District No. 2, About Us, 2023. [LINK]; North Highline Fire District, About Us, 2023. [LINK]; King County Fire Protection District No. 20, 2018 Annual Report, 2018. [LINK]; King County Fire Protection District No. 27, History, 2023. [LINK]; Valley Regional Fire Authority, About, 2023. [LINK]; King County Fire Protection District No. 34, KCFD 34, 2023. [LINK]; King County Fire Protection District No. 50, Skykomish Fire Department, 2023. [LINK]

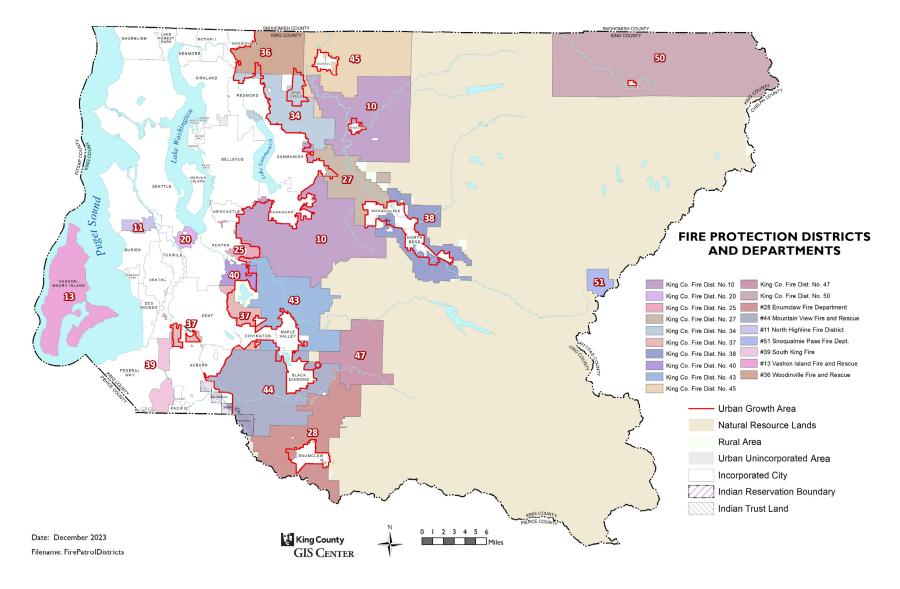


Figure 4.1-5. Fire Protection Districts and Departments

Health Services

Public health services in King County are provided by Public Health – Seattle & King County, and the Washington State Department of Health and Human Services. Public Health – Seattle & King County has 14 public health centers throughout incorporated and unincorporated King County. These centers provide a variety of health services including but not limited to adult, child, and teen health care clinics, dental health clinics, and maternity and infant health services. The White Center Public Health Center at Greenbridge is the only public health center within unincorporated King County and provides maternity, women's health, and infant health care, and nutrition services. ¹¹⁶

The King County Department of Community and Human Services provides behavioral health services for vulnerable populations including, but not limited to, crisis services, outpatient mental health treatment, and substance use disorder treatment. These services are provided through licensed mental health centers and providers throughout King County. The Department of Community and Human Services also provides a variety of social services to at-risk individuals within King County. These services provide education, employment, and legal aid to adults and young adults, intervention, and prevention for at risk youth, and assistance for those with developmental disabilities, in addition to other services.¹¹⁷

There are 11 major hospitals in King County, all of which are located in incorporated cities but serve those in both incorporated and unincorporated areas. In addition, there are a number of private practitioners and nonprofit entities that provide additional healthcare services to unincorporated King County. 118

Schools

As of 2023, there are 532 public schools serving approximately 289,000 students in all of King County. Sing County is divided into 20 school districts, encompassing both incorporated and unincorporated areas of the county, illustrated on Figure 4.1-6, School Districts, and listed with enrollment numbers in Table 4.1-4, King County School District Enrollment. However, 3 of the 20 school districts in King County do not encompass any region of unincorporated King County (Bellevue, Mercer Island, and Shoreline School Districts) and are not included below.

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¹¹⁶ King County, Public Health Centers, 2023. [LINK]

¹¹⁷ King County, About Department of Community and Human Services, 2023. [LINK]

¹¹⁸ King County, Hospitals for a Healthier Community, King County Community Health Needs Assessment 2018/2019, 2019. [LINK]

¹¹⁹ Office of Superintendent of Public Instruction (OSPI), Washington State Report Card, 2023. [LINK]

Table 4.1-4. King County School District Enrollment

School District	Enrollment (2022–2023)
Auburn School District	17,893
Enumclaw School District	4,390
Federal Way School District	21,698
Fife School District	3,825
Highline School District	18,077
Issaquah School District	19,679
Kent School District	25,303
Lake Washington School District	31,169
Northshore School District	23,103
Renton School District	15,276
Riverview School District	3,089
Seattle School District	51,542
Skykomish School District	40
Snoqualmie Valley School District	7,091
Tahoma School District	9,129
Tukwila School District	2,733
Vashon Island School District	1,510

Source: Washington State Office of Superintendent of Public Instruction, Washington State Report Card, 2023. [LINK]

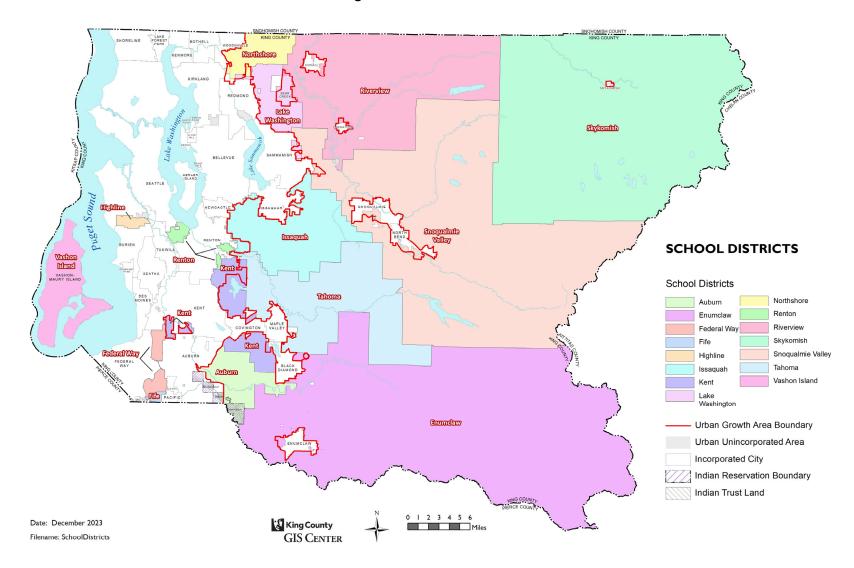


Figure 4.1-6. School Districts

4.1.3 Environmental Consequences

4.1.3.1 No Action Alternative

The No Action Alternative would maintain current and planned levels of utilities and public services. Current service levels vary throughout unincorporated King County, with higher service levels in the more populated Urban Area and lower service levels in the less populated Rural Area. Utility and public service providers would continue to accommodate growth within unincorporated King County according to existing development requirements, growth patterns, and service standards.

4.1.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Potential changes under either of the action alternatives that would affect utilities and public services include proposals that expand housing options, support the growth of business and employment in certain areas, support regional collaboration of stormwater management, expand healthcare services, and create public hygiene, sanitation, and drinking water facilities. Both action alternatives would result in changes to the location, type, and character of development in unincorporated King County. However, new development under either action alternative would be gradual and distributed throughout unincorporated King County and would generally be distributed within or near existing development. Therefore, neither action alternative would be likely to have significant adverse impacts to utilities or public services because of increased demand.

Utilities

Several of the proposals under the action alternatives would change housing density allowances in residential zones, which could require utility infrastructure upgrades or extensions for new development. These impacts would be greater in locations with less existing development and, therefore, less utility infrastructure, such as where residents and buildings rely on private wells and onsite sewage systems instead of to public water supply and sewer systems.

Both action alternatives include proposals that support the use of renewable energy (e.g., solar, wind, or hydropower) and electrification of the transportation and energy sectors, which may result in an increased demand for electricity. Any increase in electrical demand because of the action alternatives, however, would represent a small fraction relative to the areas served by Puget Sound Energy and Seattle City Light.

Public Services

As discussed above, the action alternatives would change housing density allowances in residential zones which, depending on where the new development would occur, could lead to increased demand for public services above current service levels. This may require the hiring of additional staff and potentially include adding new or expanding existing stations for emergency services, such as police and fire. Similarly, depending on where new development occurs, school districts may need to expand capacity to accommodate additional students in areas where new growth occurs. However, given the modest growth targets for the action alternatives as compared to the existing population currently served throughout the county, it is anticipated that any increases or adjustments needed for public services would be minor.

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Proposals that expand allowances for emergency housing and shelters for those experiencing homelessness could increase development of permanent and temporary housing options in urban unincorporated areas. This may increase demand for services offered by the Department of Community and Human Services under both action alternatives.

Comparison of Action Alternatives

While both action alternatives would have the same type of impacts, they may be at different scales or locations. For example, the Extensive Change Alternative may create additional demand for public services and utilities but within a smaller geographic area than the Limited Change Alternative, as it would direct more dense development to existing urban areas. This may result in fewer impacts to public services and utilities, as denser development can be served more efficiently. The Limited Change Alternative may result in less efficient development patterns, which could impact utility and public services if service areas were needed to be expanded over a larger geographic area.

Both action alternatives include proposals that support the increased use of renewable energy in the built environment. The Extensive Change Alternative would change existing regulations to reduce energy use and phase out fossil fuel use, which would reduce current demand for nonrenewable energy sources and increase demand for electricity. Programs under the Limited Change Alternative would be voluntary and, therefore, would likely result in a more gradual shift in energy sources and demand. Renewable energy facilities, such as battery storage systems, may cause public safety concerns (e.g., over potential explosions and fire), but all storage facilities would comply with fire codes. The County and energy industry are working to develop additional policy and regulatory solutions for public safety issues.

The Limited Change Alternative includes minor changes to allowances for emergency housing and shelters in urban residential and commercial zones, which could slightly increase the population in urban unincorporated areas. This may lead to an increased demand for social services offered by the County's Department of Community and Human Services. The Extensive Change Alternative includes substantial changes to allowances for temporary and permanent emergency housing and shelters with minimal development and operational conditions in all rural towns and urban unincorporated area zones. Therefore, the Extensive Change Alternative would result in further increased residential density and more extensive usage of the County's social service options, which may necessitate an expansion of staff and service areas.

4.1.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to utilities or public services are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to utilities and public services.

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4.2 Land Use and Aesthetics

4.2.1 Existing Policy and Regulatory Framework

Land use in unincorporated King County is governed by the GMA and guided by the PSRC VISION 2050 (the MPPs), the CPPs, and the Current Plan, which are all discussed further in Chapter 1. In addition, some of the primary laws, regulations, and policies that guide land use and aesthetics in unincorporated King County include the following:

- Shoreline Management Act, Chapter 90.58 RCW, and Chapters 173-26 and 173-27 WAC, which regulate the state's shorelines.
- K.C.C. Title 21A, Zoning, which includes the County's development standards, design standards, shoreline and critical areas regulations, and other provisions related to the use and development of land in King County.
- The King County SMP, which is composed of Chapter 6 of the Current Plan, Shorelines, and implementing regulations found in K.C.C. Chapter 21A.25, Shorelines.
- 2021 King County CPPs, which establish the framework for developing comprehensive plans, including land use and development patterns within unincorporated King County.
- King County Zoning Map, including property-specific conditions, which applies zoning classifications and site- or district-specific regulations on properties in unincorporated King County.
- 2021 King County Urban Growth Capacity Report, which helps guide land use planning by identifying the available land capacity, whether growth targets are being met, and whether urban areas are achieving their planned densities.

4.2.2 Affected Environment

This section provides an overview of the impacted environment, including the existing land uses and aesthetics as well as the Current Plan's land use designations in unincorporated King County.

Table 4.2-1, King County Present Land Use Parcel Data, shows the current land uses within King County based on 2023 King County assessment data. Residential uses account for 13 percent of unincorporated King County, primarily concentrated in the Rural Area in terms of area. The Rural Area consists of 51 percent residential uses, 5 percent recreational uses, and 1 percent commercial uses. Residential uses form the majority (almost 54 percent) of the land uses within the UGA, including both incorporated and unincorporated areas. Residential uses constitute approximately 3 percent of the Natural Resource Lands in the county.

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Table 4.2-1. King County Present Land Use Parcel Data

			Unincorporated King County		
	Countywide (Acres)	All UGA (Acres)	Unincorporated Urban Area (Acres / % Urban Area)	Rural Area (Acres / % Rural Area)	Natural Resource Lands (Acres / % Natural Resource Lands)
Residential	255,490	127,283	11,790 / 54%	104,147 / 51%	24,009 / 3%
Commercial	20,972	18,971	352 / 2%	1,229 / 1%	772 / <1%
Industrial	6,150	5,767	131 / 1%	347 / <1%	36 / <1%
Natural Resource Land	8,104	2,799	169 / 1%	778 / <1%	4,521 / 1%
Utilities and Transportation	72,764	7,673	304 / 1%	5,822 / 3%	59,268 / 7%
Government, Civic, and Institutions	16,153	12,961	845 / 4%	2,527 / 1%	651 / <1%
Recreation	26,765	14,760	1,556 / 7%	9,138 / 5%	2,743 / <1%
Other ^a	904,131	55,174	6,734 / 31%	78,291 / 39%	769,208 / 89%
Total	1,310,528	245,388	21,881	202,278	861,208

^a Other land uses include vacant, parking, water bodies and tidelands, accessory, and undefined uses. The large percentage of Natural Resource Lands in "other" current land uses reflects undefined current uses in the assessment data.

4.2.2.1 Land Use, Development Patterns, and Aesthetics

As described in Section 1.3, Existing Policy and Regulatory Framework, the GMA distinguishes three overarching land use categories: Urban Area, Rural Area, and Natural Resource Lands. The Current Plan utilizes these GMA land use categories as part of its planning framework to achieve the County's vision of protecting the Rural Area and Natural Resource Lands from the expansion of urban growth, consistent with the GMA, MPPs, and CPPs. Figure 4.2-1, Growth Management Act Land Use Categories, illustrates the general distribution of the Urban Area, Rural Area, and Natural Resource Lands countywide, as well as identifying Tribal lands.

The Comprehensive Plan Land Use Map is depicted in Chapter 1 of the Current Plan, Regional Growth Management Planning, and was most recently updated in 2022 (see Figure 4.2-2, Land Use). The Comprehensive Plan Land Use Map shows the 20-year vision for preferred land use patterns within the county by identifying specific land use designations for the Urban Area, Rural Area, and Natural Resource Lands. The land use map designations indicate the general locations and extents of various land uses, including agriculture, forestry, housing, commerce, industry, recreation, open spaces, and other uses as required by the GMA. Each land use designation is implemented through zoning classifications and development regulations, ensuring consistency between the Comprehensive Plan and the development regulations that implement the plan's goals and policies.

Residential land use designations account for approximately 61 percent of the unincorporated areas within the County's UGA. King County designates approximately 94 percent of its Natural Resource Lands as Forest, 6 percent as Agricultural, and less than 1 percent as Mineral Lands.

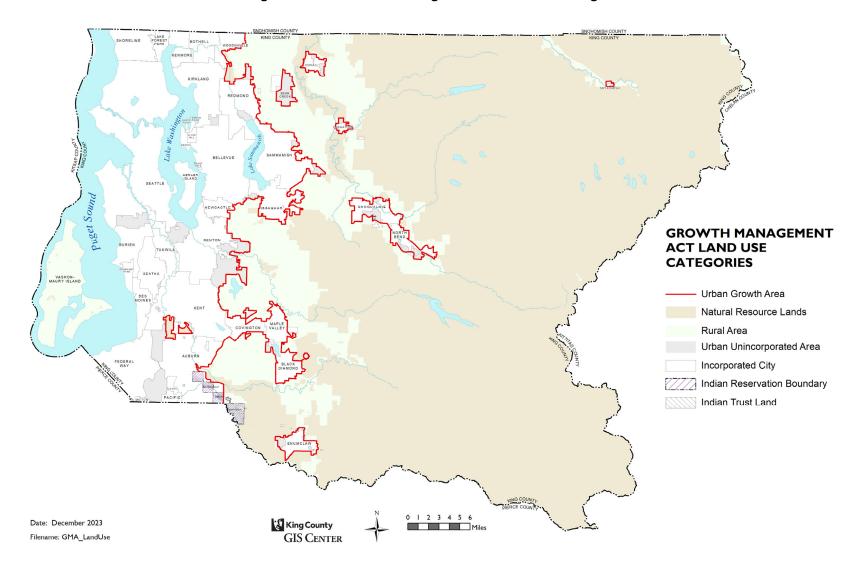


Figure 4.2-1. Growth Management Act Land Use Categories

Urban Area

King County's UGA includes all cities within the county, PAAs of these cities, and other unaffiliated urban unincorporated areas.

The majority of land in the urban unincorporated area has a residential land use map designation. The Current Plan includes a minimum density requirement for all new urban residential developments, stipulating a zoned density of 4 or more homes per acre. Urban residential zoning classifications (UR and R-1 to R-48) range from allowing single detached houses on large lots to multifamily development up to 7 stories, in addition to townhouses, mobile home parks, and cottage housing. The Current Plan also incorporates policies that guide the location of growth, densities, and rezoning in urban unincorporated areas to align with existing neighborhoods, infrastructure, services, and the environment.

The Current Plan also emphasizes locating a substantial portion of new jobs and housing within cities and urban centers, which are concentrated areas of employment and housing. All of King County's regional centers, designated in VISION 2050, are situated within cities. But the Current Plan also includes three County-specific categories of centers in urban unincorporated areas:

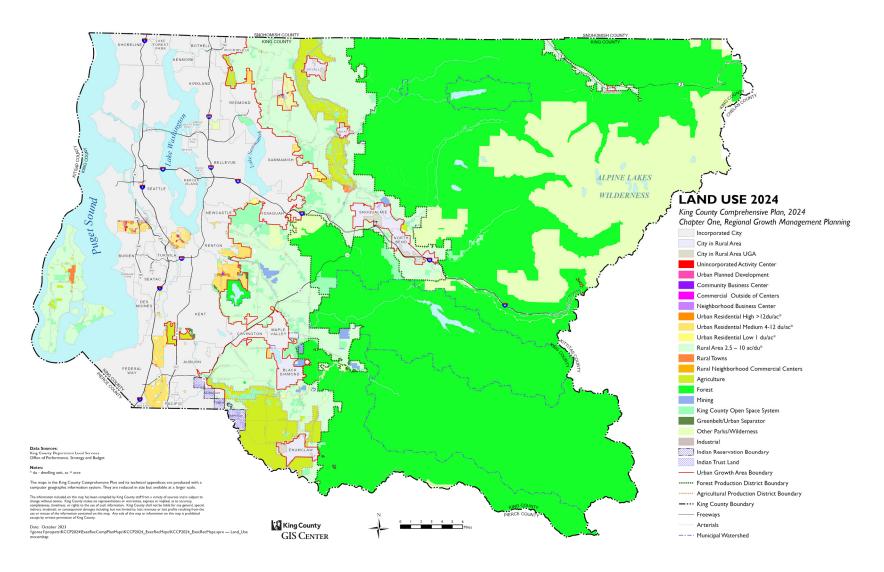
- Unincorporated Activity Centers: Higher-density, more concentrated industrial and commercial areas intended as primary locations for such commercial development and include Skyway and White Center.
- Community Business Centers: Primarily retail developments designed to serve a nearby market area of 15,000 to 40,000 people, designed to be compatible with adjacent residential uses and include Fairwood, Roxhill, Glendale, and Top Hat.
- Neighborhood Business Centers: Smaller, local centers that offer convenience goods and services
 to local residents, such as Avondale Corner, Beverly Park, Jovita, Lake Geneva, Spider Lake, and
 along Martin Luther King Jr. Way between 60th and 64th Avenue S, and along Rainier Avenue S
 between S 114th and S 117th Street.

All of the existing urban centers are shown on the Current Plan's Urban Centers map, which can be found at the end of Chapter 2 of the Current Plan, Urban Communities. Commercial and industrial areas outside of urban centers cover relatively small areas. Zoning classifications for these areas allow typical commercial and industrial uses.

King County's urban centers, such as the unincorporated activity centers or neighborhood business centers described above, can generally be categorized into two types of development styles based on the transportation modes common at the time of their development. Prior to World War II ("pre-war"), urban centers and towns were laid out with buildings tightly spaced to shorten walking distances, and grids of streets were laid to allow easy options to a range of destinations. After World War II ("postwar"), urban places were designed to accommodate increasing use of automobiles, with widely spaced buildings, larger parking lots, and hierarchical, rather than gridded, street patterns.

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Figure 4.2-2. Land Use



Pre-War Urban Centers

Pre-war centers include White Center, Skyway, and Top Hat. They are organized within a grid of streets with compact rectangular lots centered around a "main street" with commercial buildings on both sides. Figure 4.2-3, Illustration of Pre-War Urban Centers, shows two views of pre-war urban centers.



Figure 4.2-3. Illustration of Pre-War Urban Centers

Above: Mainstreet retail in White Center. Source: Google Street View, 2023.

Below: Aerial view of Top Hat, a pre-war urban center. Source: Google Earth/Landsat Copernicus, 2023.

Main street commercial buildings tend to be 1 or 2 stories high, sometimes with apartments above a commercial ground floor. They tend to be oriented towards the street or sidewalk and have large windows, creating an engaging pedestrian environment. Such buildings are often "zero lot line" buildings, meaning their side walls touch, and they typically have limited off-street parking. Relatively affordable rents in older commercial buildings are supportive of small, independent businesses and often serve as cultural anchors for local communities. Newer commercial buildings located nearby often stand alone, surrounded on several sides by surface parking lots.

A mix of pre- and post-war residential buildings like detached houses, low-rise apartment complexes (2 to 4 stories), and townhouses typically surround the commercial core, often within a grid of low-traffic streets. Industrial uses, public facilities, schools, churches, and/or parks may be located nearby as well. Older buildings may feature attractive building materials or decorative patterns that are uncommon in new construction, and older lots may feature mature trees.

Post-War Urban Centers

Post-war urban centers are located on or around major arterials, with a cluster of free-standing 1-story commercial buildings with surface parking lots. Figure 4.2-4, Illustration of Post-War Urban Centers, shows an example of a post-war urban center in the Bear Creek area. Other nearby buildings, like low-rise apartment complexes, detached houses, and manufactured home parks, tend to be located nearby but are clearly separated from commercial development by fences or greenbelts. Street systems tend to have few connections and are highly differentiated between wide multilane arterials and smaller access roads. Post-war centers include Fairwood Community Business Center or the Martin Luther King Jr. Way/60th Avenue S to 64th Avenue S Neighborhood Business Center, all of which share similar aesthetic characteristics.



Figure 4.2-4. Illustration of Post-War Urban Center

Bear Creek planned urban development. Source: Google Earth/Landsat Copernicus, 2023.

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Urban Residential

Urban residential areas outside of urban centers are mostly composed of detached houses (1 and 2 stories), although attached townhouses (2 to 3 stories), low-rise apartment complexes (2 to 4 stories), and manufactured home parks are also common. In a few places, podium-style mid-rise apartment buildings (5 to 7 stories) have been built in recent years. Figure 4.2-5, Illustration of Urban Residential, shows a typical view of urban residential areas outside of urban centers; this example is south of Top Hat.



Figure 4.2-5. Illustration of Urban Residential

Source: Google Earth/Landsat Copernicus, 2023.

Detached houses that were developed as subdivisions typically have consistent building appearance and design, whereas houses built piecemeal outside of subdivisions typically vary more in appearance. Older houses tend to feature more unique elements added by homeowners over time. Subdivisions built in the mid-20th century tend to feature short, wide buildings with ample yards, while subdivisions built in the late 20th century tend to have 2-story houses with smaller yards and more prominent garages. Many older lots feature mature trees.

In residential areas developed or platted before World War II, streets form a grid of rectangular blocks, although this grid of rights-of-way is not always fully developed, such as near the Spider Lake and Jovita centers, where many rights-of-way are unpaved or overgrown. In areas developed after World War II, streets tend to form a curving semi-connected network with many cul-de-sacs and have a pronounced street hierarchy with wide multi-lane arterials fed by smaller local access streets.

Urban residential areas continue to see new development of housing at a range of scales, including subdivisions of detached houses on vacant land, low-rise walkup multifamily buildings, and podium-style midrise development. Recent residential development reflects planning goals for a mixture of uses, walkable communities, and quality design that contributes to local aesthetics. Examples of recent

developments include the Greenbridge and Seola Gardens mixed-income communities near White Center, which feature sidewalks, green stormwater treatment infrastructure, a dense mix of housing types, small retail and community amenity spaces, and neo-traditional design. New residential subdivisions and public facilities like schools also feature sidewalks, landscaped screening, and green stormwater features. Several areas in North Highline have also been developing recently with compact, human-oriented development styles mixing in with older auto-oriented and pre-war styles (see Figure 4.2-5, Illustration of Urban Residential).

The County has also established urban separators, which are low-density areas inside the UGA that serve as open space corridors, provide visual contrast to continuous development, and enhance the distinct identities of communities. Urban separators are designated in the CPPs and are shown in the official land use map in the Current Plan (see Figure 4.2-2, Land Use). Urban separators aid in preserving environmentally critical areas, protecting habitat for fish and wildlife, offering recreational benefits like parks and trails, and fulfilling the GMA requirement for greenbelts and open space within the UGA.

Rural Area

King County's Rural Area is situated east of the contiguous UGA, with the exception of Vashon-Maury Island. In accordance with the GMA, King County has designated the Rural Area with the purpose of protecting these lands from urban levels of development and preventing encroachment from sprawl. This is achieved by permitting land uses that support and align with the established rural character, while accommodating a variety of rural uses and densities. The Rural Area also supports natural resource-based industries and uses, including working farms and forests. Figure 4.2-6, Illustration of Rural Area, shows an example of a Rural Area in southeast King County.

Although the primary land use in the Rural Area is residential, a handful of nonresidential uses also exist. Some of the primary land use categories include the following:

- Rural Area: Encompassing low-density residential developments, forestry, farming, livestock uses, recreation, and other traditional rural activities.
- Rural Town: Housing historical settlements and commercial establishments serving rural residents, including Fall City, Vashon, and Snoqualmie Pass.
- Rural Neighborhood Commercial Centers: Catering to nearby rural residents with small-scale convenience services, such as Cumberland and Preston.

King County's Rural Area is home to communities such as the Hobart Plateau, Vashon-Maury Island, the Snoqualmie Valley, and the Enumclaw Plateau. These rural communities are characterized by elements such as low-density residential development, farms, ranches, small-scale commercial and industrial uses, forests, watersheds that support fisheries and flood hazard management, mining activities, historic sites and structures, archaeological sites, and recreational areas. These rural uses complement and support the more extensive resource-oriented areas within the designated Natural Resource Lands. The positioning of the Rural Area, generally between the UGA boundary and designated Natural Resource Lands, helps protect agriculture and forest uses against incompatible activities. The land use designations and implementing zoning in the Rural Area are designed to provide services and essential goods for rural residents and local businesses, with surrounding cities serving as the primary location for urban services.

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The GMA and RCW 36.70A.011 acknowledge the importance of rural lands and seek to protect rural character, where applicable, to accomplish a variety of rural economy, lifestyle, wildlife, open space, and quality of life goals. The Current Plan defines "rural character" as the "pattern of land use and development established by a county in the rural element of its comprehensive plan" and includes the following provisions:

- a. In which open space, the natural landscape, and vegetation predominate over the built environment;
- b. That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in Rural Areas;
- c. That provide visual landscapes that are traditionally found in Rural Areas and communities;
- d. That are compatible with the use of the land by wildlife and for fish and wildlife habitat;
- e. That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;
- f. That generally do not require the extension of urban governmental services; and
- g. That are consistent with the protection of natural surface water flows and groundwater and surface water recharge and discharge areas. 120

Rural Towns and Rural Neighborhood Commercial Centers

Rural Towns are designated in the unincorporated Rural Area where there is an existing concentration of higher residential densities and economic activity. Approximately 1,056 acres are designated as Rural Towns and include Vashon, Fall City, and Snoqualmie Pass.

Nearly all zone types may be adopted in Rural Towns, potentially allowing a wide range of buildings. County policies direct growth to be de-prioritized in the Rural Area, including Rural Towns, so applied zones are likely to be reflective of existing building types in most areas. For instance, Current Plan policy RP-203 states that "King County shall continue to support the reduction of sprawl by focusing growth and future development in the Urban Growth Area, consistent with adopted growth targets." However, because of parking minimums, dimensional standards in zoning, building code stipulations, and other rules, the form and layout of new buildings may have quite different form and layout than pre-existing buildings of similar uses.

Rural Neighborhood Commercial Centers are small areas that currently are or historically were the site of nonresidential uses serving the surrounding area. There are 26 Rural Neighborhood Commercial Centers designated, comprising a total of 272 acres.

Rural Towns tend to have similar aesthetics to pre-war urban centers. Development activity in Rural Towns has been limited in recent decades, with occasional infill development occurring when vacant lots become available or older structures are replaced. Those trends would likely continue under the action alternatives; however, changes to roadways can also have aesthetic impacts.

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¹²⁰ King County, 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

Rural Area Outside of Towns and Centers

Outside of towns, Rural Area zoning prevents new development at densities above 1 unit per 5 acres in most of the Rural Area (although there are denser RA-2.5 parcels), meaning the principal form of new residential development is often houses on large lots. The Rural Area is characterized by scattered development across human-influenced landscapes of farmland, forests, or other natural areas. Development patterns are typified by detached houses on large lots, low-intensity industrial uses like farms, ranches, and food processing, and vacant land. Historic barns and farm buildings are a prominent visual feature in many areas. Schools, fire stations, medical facilities, churches, and other special or public buildings constructed in recent decades may also be visually prominent.

Many parts of the Rural Area are forested, often with dense coverage of conifers that limit sightlines and create year-round shade. Houses and other land uses nearby may be invisible from the road or neighboring properties in forested areas. Agricultural areas and areas along shorelines tend to have long, open sightlines, showcasing landforms, watersheds, buildings, and distant mountains.



Figure 4.2-6. Illustration of Rural Area

Aerial view of rural lands in southeast King County. Source: Google Earth/Landsat Copernicus, 2023.

Natural Resource Lands

King County has established three land use designations for Natural Resource Lands: Agriculture, Forest, and Mining. These land use designations are intended to ensure the continued conservation and productive utilization of the Natural Resource Lands. These designations and areas are described further in Section 3.4, Natural Resources.

Tribal Land

There are two federally recognized Tribes located in King County: the Muckleshoot Indian Tribe and the Snoqualmie Indian Tribe. The County does not have land use jurisdiction over land held in trust or assert land use jurisdiction on fee simple parcels owned by members of the Tribes or the Tribes themselves.

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It is important to note that not all Tribal Land is shown on the land use map. County records indicate that there are approximately 99 square miles (over 63,000 acres) designated as Tribal lands held in trust or land in fee. ¹²¹

Additional background information on Tribes and Tribal Lands in the county is included in Section 4.5, Historic and Cultural Resources.

4.2.2.2 Land Use Designations and Implementing Zoning

The Current Plan's land use designations and the corresponding implementing zones organized by Urban Area, Rural Area, and Natural Resource Lands are listed in Table 4.2-2, Current King County Land Use Designations and Implementing Zoning.

Table 4.2-2. Current King County Land Use Designations and Implementing Zoning

King County Land Use Map Designation	Implementing Zoning Classifications ^a
Urban Area (UGA)	
Unincorporated Activity Center This designation is one of the primary locations for commercial and industrial development in urban unincorporated King County. White Center and Skyway are the only designated unincorporated activity centers.	R-12, R-18, R-24, R-48, NB, CB, O, I
Urban Planned Development There are no Urban Planned Developments in unincorporated King County.	R-1, R-4, R-6, R-8, R-12, R-18, R-24, R-48, NB, CB, RB, O, I
UGA for Cities in Rural Area	UR The following two zones were in place in the North Bend UGA when the 1994 Comprehensive Plan was adopted: I, RB
Residential	
Urban Residential High This designation allows for residential densities of greater than 12 dwelling units per acre in urban areas that are served at the time of development by adequate public sewers, water supply, roads, and other needed public facilities and services.	R-18, R-24, R-48
Urban Residential Medium This designation allows for residential densities of 4 to 12 dwelling units per acre in urban unincorporated areas that are predominantly environmentally unconstrained and are served at the time of development by adequate public sewers, water supply, roads, and other needed public facilities and services.	R-4, R-6, R-8, R-12
Urban Residential Low This designation is for limited circumstances in urban unincorporated areas in order to protect floodplains, critical aquifer recharge areas, high function wetlands and unstable slopes from degradation, and the link these environmental features have to a network of open space, fish and wildlife habitat, and urban separators.	R-1

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¹²¹ King County GIS Center, Parcel Record Assessor Extract Table, August 2023. [LINK]

Table 4.2-2. Current King County Land Use Designations and Implementing Zoning (continued)

King County Land Use Map Designation	Implementing Zoning Classifications ^a
Commercial	
Community Business Center This designation is for primarily retail developments designed to serve a nearby market area of 15,000 to 40,000 people. Community business centers should be sited so they do not adversely affect other centers and are easily accessible by motor vehicles, public transportation, walking, or bicycling.	NB, CB, O
Commercial Outside of Centers This designation recognized commercial uses predating the adoption of the County's first GMA mandated Comprehensive Plan. These are isolated urban unincorporated areas outside of a designated center (i.e. unincorporated activity center, community business center, or neighborhood business center).	NB, CB, RB, O, I – this is the range of existing zoning in place when the 1994 Comprehensive Plan was adopted.
Neighborhood Business Center This designation is for smaller local business centers.	NB, O
Industrial This designation provides for the location and grouping of industrial enterprises and activities involving manufacturing, assembly, fabrication, processing, bulk handling and storage, research facilities, warehousing, and heavy trucks. The industrial designation also protects the County's industrial land base for industrial economic development and employment opportunities.	I
Rural Area	
Rural Area Characterized by low-density residential development, farms, ranches, forests, watersheds crucial for both fisheries and flood hazard management, mining areas, small cities and towns, historic sites and buildings, archaeological sites, and regionally important recreation areas.	RA-2.5, RA-5, RA-10, RA-20
Rural Neighborhood Commercial Centers These centers provide limited, local convenience shopping, restaurants, and services to meet the daily needs of rural residents. Rural Neighborhood Commercial Centers are small commercial developments, or in some cases historic towns or buildings, that are too small to provide more than convenience shopping and services to surrounding residents. They generally do not have infrastructure or services such as water supply or sewage disposal systems any different from those serving the surrounding area.	NB
Rural Towns Rural Towns are unincorporated towns governed directly by King County but may provide a focal point for community groups, such as chambers of commerce or community councils, to participate in public affairs. The purposes of the Rural Town designation are to recognize existing concentrations of higher density and economic activity in the Rural Area, whether by virtue of historical rural settlements or redesignation of an urban commercial center; provide a physical focus for the historic identity of rural communities; and allow for modest growth of residential and economic uses within these designations if supported by the community and adequate utilities and other public services are available.	R-1, R-4, R-6, R-8, R-12, R-18, R-24, R-48, NB, CB, RB, O, I

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Table 4.2-2. Current King County Land Use Designations and Implementing Zoning (continued)

King County Land Use Map Designation	Implementing Zoning Classifications ^a
Natural Resource Lands	
Agriculture	A-10, A-35
The County's designation of Agriculture includes land used for commercial purposes for either the raising of crops or livestock or the production of agricultural products or both, including land within APDs. APDs are blocks of contiguous farmlands where agriculture is supported through the protection of agricultural soils and related support services and activities.	
Forest	F, M
The County's designation of Forest includes regionally and nationally significant forests devoted primarily to growth and harvesting forest and timber products, including FPDs as well as land outside of FPDs such as U.S. Forest Service Lands. FPDs conserve large blocks of commercially valuable forestland for the long term. The designation and zoning are designed to prevent intrusion of incompatible uses, manage adjacent land uses to minimize land use conflicts, and prevent or discourage conversion from forestry to other uses.	
Mining	M
The County's designation of Mining includes those sites that had Potential Mineral zoning prior to the date of the adoption of the 1994 Comprehensive Plan and those sites that had Mineral zoning as of the date of the adoption of the 2000 Comprehensive Plan Update.	
Other/Unclassified	
Greenbelt/Urban Separator	R-1
Urban Separators are low-density areas within the UGA that create open space corridors, provide a visual contrast to continuous development, and reinforce the unique identities of communities. Urban separators protect adjacent resource land, environmentally sensitive areas, or the Rural Area, and create open space corridors within and between urban areas which provide environmental, visual, recreations and wildlife benefits. They also provide recreational benefits, such as parks and trails, and meet the GMA's requirement for greenbelts and open space in the UGA.	
King County Open Space	All zones
The County's designation of open space includes those lands that are part of the King County open space system as well as state parks and natural resource conservation areas and federal wilderness areas in unincorporated King County.	
Other Parks/Wilderness	All zones

Source: King County Comprehensive Plan, 2022.

Notes: A = Agricultural (10- or 35-acre minimum lot area); F = Forest (80-acre minimum lot area); M= Mineral; RA = Rural Area (2.5-acre, 5-acre, 10-acre, or 20-acre minimum density); UR = Urban Reserve; R = Urban Residential (base density in dwelling units per acre); NB = Neighborhood Business; CB = Community Business; RB = Regional Business; O = Office; I = Industrial

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^a This is the range of zoning that may be allowed within each comprehensive plan land use designations subject to comprehensive plan and subarea plan policies. Actual zoning on a specific property is determined through the area-wide zoning process or through a quasi-judicial rezone application.

Zoning and Development Standards

K.C.C. Title 21A, Zoning, includes a variety of development standards regulating height, bulk, and scale, as well as design standards. Height, density, setbacks, minimum lot sizes, and other standards are defined in K.C.C. Chapter 21A.12, Development Standards – Density and Dimensions. In residential zones, dwelling unit densities are allowed roughly according to the numeral in the zone name. For example, R-18 generally allows development of 18 units per acre. RA zones (RA-2.5 through RA-20) allow lower densities of residential development from 1 unit per 5 acres to 1 unit per 20 acres.

Height limits for new buildings are assigned by zone, with most zones having a base height that can be exceeded through participation in various incentive programs. Generalized current height limits (see specifics and exceptions in the code) are:

- RA zones: 40-foot base; 75-foot maximum.
- UR and R-1: 35-foot base; 75-foot maximum.
- R-4, R-6, and R-8: 25- or 35-foot base; 30-, 45-, or 75-foot maximum.
- R-12: 60-foot base; 75-foot maximum.
- R-18, R-24, and R-48: 60foot base; 75- or 80-foot maximum.
- Resource zones (A-10, A-35, F, and M): 35-foot base, 75-foot maximum.
- Commercial/industrial (NB, CB, RB, O, I): 35- or 45-foot base; 45-, 65-, 75-, 80-, or 85-foot maximum.

Minimum street setbacks in RA zones are 30 feet and are 30 to 50 feet in resource zones. Street setbacks in other residential and commercial zones are 10, 20, and 25 feet. A similar pattern exists for maximum impervious surface standards, which greatly limit hard surfaces in zones within the Rural Area and on Natural Resource Lands and are more flexible in other residential and commercial zones.

Together, these regulate the allowed building envelope and set the pattern for the spectrum of lower intensity, smaller, more spread out uses in the Rural Area to greater intensity, larger, denser uses in more urban areas.

More detailed design standards are also included in K.C.C. Title 21A. For example, K.C.C. Chapter 21A.14, Development Standards – Design Requirements, includes site layout, mixed-use development design features, residential open space, and subdivision standards. In addition, K.C.C. Chapter 21A.38, General Provisions – Property-Specific Development Standards/Special District Overlays, applies site-specific standards to select places and/or types of development throughout the county (e.g., pedestrian-oriented commercial development in CB, RB, and O zones in Urban Centers; North Highline commercial and industrial; aviation facilities; highway-oriented development; Bear Creek office and retail; Fall City business district; Martin Luther King Jr. Way South mixed use; Vashon Rural Town affordable housing; and Skyway microenterprise). These standards often allow additional land uses or limit certain land uses and sometimes require human-oriented design characteristics.

Critical Areas

Specific land use and development regulations, codified in K.C.C. Chapter 21A.24, Critical Areas, apply to critical areas and their buffers in unincorporated King County. Critical area regulations typically restrict the size and type of development and use of property located in a critical area to protect public health and safety and to promote environmental health in the region. Critical areas include areas at high risk for erosion, landslides, seismic liquefaction, channel migration, or flooding; subsidence due to

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abandoned underground coal mines; critical aquifer recharge areas; wetlands; and aquatic areas such as streams, rivers, lakes, and marine waters. These critical areas are described further in Section 3.2, Water Resources, and Section 3.3, Wildlife and Habitat. The County's policies for designating and safeguarding critical areas within unincorporated regions of the county are included in Chapter 5 of the Current Plan, Environment.

Shorelines

Like critical areas, the county's shoreline is also regulated by specific land use and development regulations. The King County SMP, which is composed of Chapter 6 of the Current Plan, Shorelines, and implementing regulations found in K.C.C. Chapter 21A.25, Shorelines, is described further in Section 3.2, Water Resources.

The County's SMP identifies eight shoreline environment designations, along with the purpose, criteria, and management policies for each. Shoreline environment designations are classifications that reflect local shoreline conditions, including ecological functions and shoreline development. A description of each shoreline environmental designation is listed in Table 4.2-3, King County Shoreline Environmental Designations. These shoreline environment designations provide the framework for implementing specific shoreline policies and regulatory measures tied to use and development in each shoreline environment designation. ¹²² Figure 3.2-3, Shorelines of the State, illustrates the extent of shoreline managed under the County's SMP and identifies the shoreline environmental designation.

Table 4.2-3. King County Shoreline Environmental Designations

Shoreline Environmental Designation	Description
High Intensity	Applied to areas that provide high-intensity, water-oriented commercial, transportation, and industrial uses.
Residential	Applied to accommodate residential uses at urban densities while allowing for nonresidential uses that are consistent with the protection of the shoreline jurisdiction.
Rural	Applied to accommodate rural residential shoreline development, while allowing for rural nonresidential uses that are consistent with the protection of the shoreline.
Conservancy	Applied to protect and conserve the shoreline for ecological, public safety, and recreation purposes. Includes areas with important shoreline ecological processes and functions, valuable historic and cultural features, flood and geological hazards, and recreational opportunities. Residential areas can also be designated as conservancy shorelines.
Resource	Applied to allow for mining and agriculture land uses, except for shorelines that are relatively intact or that have minimally degraded shoreline processes and functions.
Forestry	Applied in areas to allow for forest production and protect municipal water supplies.
Natural	Applied to shorelines that are relatively intact or have minimally degraded shoreline processes and functions that are intolerant of human use.
Aquatic	Applied to the areas waterward of the ordinary high water mark.

Source: King County, 2016 King County Comprehensive Plan, last updated December 2022. [LINK]

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¹²² WAC 173-26-191(1)(d).

In general, the King County SMP protects natural resources, encourages land uses that require a waterfront location (with the exception of single detached residences), and encourages public access to public shorelines. Specifically, the SMP establishes mandatory preferences for uses that are unique to or dependent upon a shoreline location. ¹²³

Wildland Urban Interface

As described in Section 3.4, Natural Resources, the WUI is the zone of transition between development and undeveloped land or vegetative fuels. Additional fire protection standards are required in areas in proximity to the WUI. The State Building Code, implemented through K.C.C. Titles 16 and 17, requires certain development standards for structures within the WUI, such as driveway access; ignition-resistant construction, including decks; and the creation and maintenance of defensible space around buildings within WUIs. 124

4.2.3 Environmental Consequences

4.2.3.1 No Action Alternative

The No Action Alternative would maintain the Current Plan's goals and policies, land use map designations, and UGA boundary. The county would experience development, redevelopment, and conversion of existing land uses over time. Anticipated growth patterns would align with the existing zoning classifications' allowed land uses and development standards already in place, which would continue to guide growth patterns. Existing zoning and development regulations would continue to shape the footprints and envelopes of new and redeveloped buildings.

Almost 90 percent of housing growth in unincorporated King County under the Current Plan has been in urban areas. Adequate zoning capacity exists to accommodate growth targets, which the County is on track to meet. These development trends and patterns would continue and include new development that would be at a greater height, bulk, and scale than existing conditions. PAAs could potentially be annexed by adjacent municipalities. This could result in changes to land use and a reduction in the size of the urban unincorporated area; however, annexation levels have been minimal since 2016.

The No Action Alternative assumes an increase in population and employment consistent with 2012 CPP growth targets, which are higher than the 2021 CPP targets. Neither growth target is anticipated to result in a substantial change in population growth or a meaningful differentiation between the No Action Alternative and the action alternatives. Between 2012 and 2018, an average of 200 new residential units per year were permitted in the Rural Area and on Natural Resource Lands, and this small percentage of growth outside of the Urban Area would be expected to continue. 128

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¹²³ King County, Shoreline Master Program Technical Appendix, Volume 1. Shoreline Inventory and Characterization: Methodology and Results, 2007. [LINK]

¹²⁴ Chapter 51-55 WAC, Washington Wildland-Urban Interface Code. 2023. [LINK]

¹²⁵ Eighty-nine percent of housing unit growth 2010-2020, from a King County 2023 analysis of U.S. Census Bureau block-level data, Decennial Census, 2010 and 2020. Growth assumes a constant 2020 unincorporated area boundary to control for population annexed to cities.

¹²⁶ King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

¹²⁷ Ibid.

¹²⁸ King County, 2021 King County Urban Growth Capacity Report, June 2021. [LINK]

The No Action Alternative could result in inconsistency between the Current Plan and recent amendments to the GMA, such as Engrossed Second Substitute House Bill 1220 (Chapter 254, Laws of 2021) which directs more intensive planning for affordable housing. The No Action Alternative would not implement updates mandated by the MPPs or the 2021 CPPs. By not amending the Current Plan to align with new GMA mandates, the MPPs, and the CPPs, the County's ability to accommodate and manage urban growth effectively may not align with coordinated regional planning efforts. Furthermore, the County could lose eligibility for state grants and other funding if plan updates and development codes are not adopted consistent with the GMA, MPPs, and CPPs.

4.2.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Both action alternatives would involve amendments to the Current Plan's goals, policies, and land use designations, as well as implementing development standards that are necessitated by updates and amendments to the GMA, MPPs, and CPPs.

Both action alternatives, like the No Action Alternative, assume some increase in population and employment in unincorporated King County over the 20-year planning period, which could lead to new development as well as redevelopment in some areas, with a clear focus on accommodating the allocated growth targets within the Urban Area. The actual type of land use and the rate and distribution of future development would be influenced, in part, by the implementation of existing and amended Comprehensive Plan policies, related regulations and actions, and by decisions made by individual property owners and developers. Though the action alternatives would result in changes to land use and aesthetics, neither alternative would result in significant, unavoidable adverse impacts to land use or aesthetics.

The action alternatives may result in the following types of impacts:

- Greater height, bulk, or scale of development than what would occur under the No Action Alternative.
- Changes to certain uses within urban and rural lands, thereby changing some physical, natural, and cultural components of the landscape, such as landforms, vegetation, water features and land uses.
- Changes to perceived beauty or character of the rural landscape, which includes the Rural Area and Natural Resource Lands.
- Changes to visual access to nature, such as where higher-intensity development patterns are expected.

For example, under both action alternatives, more buildings would likely develop at a larger scale and in more locations than under the No Action Alternative because of upzoning and increased development capacity incentives or requirements. With greater housing densities allowed, there may be localized impacts in neighborhoods transitioning from more suburban to urban densities that include more closely spaced and a greater variety of housing types, such as duplexes, triplexes, townhouses, stacked flats, and garden apartments. More 3-story buildings may develop adjacent to existing 1- and 2-story buildings than under the No Action Alternative, though the base height limit would remain at 35 feet (or in some cases, 25 feet) under both action alternatives.

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Under both action alternatives, proposals to amend development standards and land use allowances in industrial zones could cause an increase in industrial buildings and structures in the Rural Area or on Natural Resource Lands. Depending on the scale and type of industry, these could be bulkier buildings than would otherwise have developed and potentially less consistent with existing and planned land use.

Both action alternatives include proposals that encourage or require the use of renewable energy to phase out fossil fuel use. Renewable energy infrastructure, such as wind turbines, solar panel fields, and other facilities, can require large land areas, meaning that they would likely develop in the Rural Area and on Natural Resource Lands. A large-scale facility would have aesthetic impacts on rural views, with turbines, panels, and large battery storage systems replacing natural, agricultural, industrial, or other resource uses. Facilitating or incentivizing conversion of former mineral extraction sites as green energy facilities may be seen as a neutral or positive aesthetic impact.

Proposals that change allowances for the development of resorts could cause more resorts to develop, which may be of a different aesthetic than existing uses or those that would develop under the No Action Alternative.

With increased allowances for tourism and rural economic development uses in the Rural Area and agricultural zones, more development may occur in the Rural Area, especially at the rural/urban divide. However, this could also be considered a positive aesthetic impact compared to other uses allowed under the No Action Alternative in the same areas.

Both action alternatives include proposals that seek to improve regulations for working resource lands in the county, including farmlands and forest lands. Improvements to preservation programs and encouragement of active production on farmland would maintain an agricultural aesthetic in more places in the APDs and agricultural zones. This would generally be seen as a positive aesthetic impact and consistent with existing and planned land use, but some perceived negatives may occur with semi-industrial farm buildings and operations. While many forest and natural areas are protected through public or private preservation programs, normal activities on working resource lands can cause significant aesthetic changes, similar to under the No Action Alternative. Timber harvesting on unpreserved forests, especially clear cutting, can affect the quality of view from surrounding properties and rights of way. Changes to infrastructure, such as the expansion of roads or construction of electric transmission lines, can also affect aesthetic conditions.

Under both action alternatives, modifications to the TDR Program may result in program goals being achieved more quickly, including more development in urban unincorporated areas and further protection of open spaces in the Rural Area and on Natural Resource Lands. This may be seen as an overall positive aesthetic impact, though urban unincorporated areas would experience more intrazonal (i.e., adjacent lots) transitions in height, bulk, and scale. Additionally, adjustments to the UGA boundary or changes to the Four-to-One program may impact where urban and rural development is allowed and could potentially change the character of the area. More urban development could potentially occur in formerly Rural Area locations that have been redesignated as urban, most likely near Black Diamond, Snoqualmie, North Bend, on the edge of the UGA, and potentially in Sammamish and Renton.

Both action alternatives include proposals that encourage or require parks and open space and green infrastructure, which may improve visual access to nature in urban unincorporated areas and would generally increase the total area of these land uses. Additionally, proposals that discourage or prohibit development of hard shoreline stabilization (e.g., bulkheads), shorelines would slowly redevelop with a more natural shoreline with housing set further back from the water. Though many may see this as a positive aesthetic change, natural shorelines can appear "messy" to some without the rigid human-designed geometries separating land/housing and water that provide deck/yard space and non-naturalized

gardens. The shift away from hard shoreline stabilization is consistent with the goals of the Shoreline Management Act and the County's SMP.

Comparison of Action Alternatives

The action alternatives have differing approaches to residential density incentives, zoning changes, and revisions to the Four-to-One Program and TDR programs, all of which would result in differences in the type and scale of impacts between the action alternatives. The primary difference between the action alternatives is the proposed scale of development and the approach to guiding the location and type of land use and development within unincorporated King County.

For example, increasing development capacity bonuses to incentivize inclusionary housing could result in larger buildings. Under the Limited Change Alternative, the areas that would be eligible for these increases would be limited to Skyway-West Hill and North Highline. Expanding or requiring inclusionary housing in all unincorporated areas under the Extensive Change Alternative could result in larger scale buildings in more places if accomplished through development capacity incentives. This may be particularly noticeable in the unincorporated Rural Area, where building density allowed under the No Action Alternative would be lower.

Under the Limited Change Alternative, allowing some additional high-density housing near transit and employment through minor upzones (e.g., upzoning R-18 to R-24 or R-12 to R-18) may result in modest changes to bulk and scale of redevelopment. In general, the height limits and setbacks would remain constant. An upzone from R-12 to a more intense zone would also result in an increased maximum height limit, from 75 feet to a potential for up to 80 feet with incentive bonuses. Under the Extensive Change Alternative, requiring high-density housing in all areas near transit and employment could result in greater bulk and scale of development than with the Limited Change or No Action alternatives. On the other hand, it could also slow redevelopment if the construction types required for those densities are not currently economically feasible. This would be especially true if residential parking requirements are not reduced. Structured parking would be economically feasible in very few places in unincorporated areas, so it would be challenging to achieve the higher densities required. This may result in fewer short-term bulk and scale aesthetics impacts under the Extensive Change Alternative, but ultimately the same or more than under the Limited Change Alternative.

Currently, a 3-story building may develop adjacent to existing 1- and 2-story buildings in R zones, but this may accelerate under the action alternatives with increased densities allowed. Under the Limited Change Alternative, allowing up to 8 dwelling units per acre in R-1 through R-8 zones would increase opportunities for middle housing—the types of homes that have densities somewhere between detached single unit houses and large buildings with many units—redevelopment in R zones, which are in Rural Towns and urban zones. This may be especially noticeable in R-1, where only 1 unit per acre is currently allowed, and noticeable in R-4 and R-6. Buildings may be smaller, more closely spaced, or include ADUs, duplexes/triplexes, or a mix of housing types to achieve the greater density allowed. Under the Extensive Change Alternative, a greater variety of housing types, such as duplexes, triplexes, cottage houses, stacked flats, townhouses, carriage houses, and/or garden apartments may develop in R-4 through R-8 zones, where up to 12 dwelling units per acre would be allowed. Though densities would increase, height limits, setbacks, and other development standards would limit visual impacts.

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The action alternatives proposals include programmatic or regulatory modifications (e.g., UGA boundary exchange rules, TDR Program, Four-to-One Program) that may redefine what is designated rural or urban. Cumulatively, the Limited Change Alternative would likely result in limited designation of rural versus urban. The Extensive Change Alternative would potentially:

- Permanently conserve more rural land through the TDR Program, especially on Vashon-Maury Island, preserving rural character in places already considered rural.
- Shift land to the Urban Area from the Rural Area or Natural Resource Lands in more places, resulting in changes to where urban development is allowed.
- Increase urban development within the unincorporated Rural Area as compared to the Limited Change Alternative.

Related to the Four-to-One Program, a voluntary program that has led to the conservation of 1,300 acres of permanent open space since its inception, the Limited Change Alternative would include minor procedural modifications that could increase participation and result in more land conservation outside of the UGA boundary. The Extensive Change Alternative considers making more substantive updates to the Four-to-One Program requirements, including using a different UGA boundary, increasing the minimum residential density for land allowed within the UGA, and other changes that are more likely to increase participation in this program and could alter the geographic pattern of land designated for conservation. In some instances, the total amount of land preserved for conservation purposes could be reduced in exchange for preserving a smaller but higher quality of land conserved for open space.

The Limited Change Alternative also proposes making minor modifications to the TDR Program, which could include clarifying study requirements and site calculations, allowing for deed restrictions in addition to conservation easements on TDR sending sites, and/or allowing for the TDR bank to sell partial TDR increments. These minor changes would be unlikely to significantly increase the rate of land conservation. The Extensive Change Alternative would expand TDR incentives, such as providing bonus TDRs for Forest zoned land and vacant marine shoreline sending sites without bulkheads, allowing TDR sending sites on Vashon-Maury Island, and allowing urban open space previously acquired using conservation futures tax funding sites to become TDR sending sites. The Extensive Change Alternative is not expected to greatly increase the rate of land conservation; however, the quality of the land conserved may be of higher environmental value through the use of bonuses or incentives given to lands with less development or altered conditions present.

A variety of uses that would not be allowed in the Rural Area under the No Action Alternative are proposed under the action alternatives. Beyond the impacts common to both alternatives, the Extensive Change Alternative may have the following types of consequences over the Limited Change Alternative:

- Industrial zoning would be allowed in more places, which means much bulkier buildings and structures could be developed in the Rural Area than would otherwise have occurred.
- More former mineral extraction sites may be converted to green energy facilities under the Extensive Change Alternative, which may be seen as a positive or neutral aesthetic change.
- Resorts may develop in more places than where they are currently allowed. Development may be of a greater bulk or scale, or generally a different aesthetic.
- Additional tourism and economic development-oriented building may occur in Rural Area and agricultural zones, which may be of a different aesthetic than existing uses. If the business depends on agriculture or a natural environment for its success, there may be no or limited

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- aesthetic impacts. However, if the use is unrelated, such as a theme park, there may be aesthetic impacts depending on the design.
- Improvements to farmland preservation programs may have a greater positive impact on maintaining an agriculture aesthetic, but also potentially more impacts due to semi-industrial farm buildings and operations.

The action alternatives also propose different ways to address materials processing uses. Under the Limited Change Alternative, adjusting setback and buffer requirements may reduce impacts of potentially aesthetically incompatible neighboring uses. Under the Extensive Change Alternative, allowing materials processing in more zones with limited development conditions could result in development that impacts the adjacent property in more places. Depending on the neighboring use, materials processing may be considered a negative aesthetic impact.

Lastly, several proposals under both action alternatives would increase visual access to nature and vegetation. In general, the Extensive Change Alternative does so to a greater degree, such as by requiring parks and open spaces in urban unincorporated areas, proposing stronger development standards for green infrastructure, and restricting hard shoreline stabilization techniques in favor of more natural shorelines. Additional urban parks and open spaces, particularly in Opportunity Areas, may decrease development feasibility in the near term unless paired with public investment, so there may be fewer aesthetics impacts with less redevelopment. However, in the long term, more development would include open spaces, improving visual access to nature if designed with natural elements. If large recreational spaces are developed, sports field or other significant lighting, without proper design, could impact adjacent properties.

4.2.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to land use and aesthetics are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to land use and aesthetics.

Though aesthetic changes may occur, none are considered significant adverse impacts, because any increased height, bulk, or scale could be considered as positive aesthetic impacts if they occur in alignment with the Plan's vision for an area. Two proposals may be perceived as adversely impactful: increased residential densities in residential zones for middle housing and changes to allowed uses in the Rural Area and on Natural Resource Lands. Although not required, existing design and development standards could be strengthened to emphasize design that is human oriented, encourages social interactions and neighborly trust-building, respects privacy needs, clarifies ownership of public and private space and includes appropriate and feasible open space to mitigate potential aesthetic impacts of increasing residential densities. Likewise, additional or updated commercial and industrial development and design standards, beyond those in K.C.C. Title 21A, may be used to set bounds around the design of resort, tourism, and economic development-oriented properties; materials processing facilities; wind and solar farms; and other uses that may be perceived by some as being aesthetically out of place.

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4.3 Housing

This section discusses housing supply, housing affordability, and household characteristics in King County, including unincorporated King County where available, and evaluates potential impacts to housing that may be associated with 2024 Update alternatives.

4.3.1 Existing Policy and Regulatory Framework

Some of the primary laws, regulations, and policies guiding housing development in unincorporated King County include the following:

- GMA, RCW 36.70A.020, which requires local governments to plan for and accommodate housing
 affordable to all economic segments of the population of this state, promote a variety of
 residential densities and housing types, and encourage preservation of existing housing stock,
 including but not limited to the following recent amendments:
 - Engrossed Second Substitute House Bill 1220 (Chapter 254, Laws of 2021), which amended the GMA to instruct local governments, including the County and its incorporated jurisdictions, to "plan for and accommodate" housing affordable to all income levels.
 - Engrossed House Bill 1337 (Chapter 334, Laws of 2023), which amended the GMA to require local governments to adopt local development regulations that allow for the construction of ADUs within UGAs and comply with certain policies.
- K.C.C. Title 21A, Zoning, which includes the County's development standards, design standards, shoreline and critical areas regulations, and other provisions related to the use and development of land in King County.
- 2021 King County CPPs, which establish the framework for developing comprehensive plans, including the housing element.

4.3.2 Affected Environment

This section highlights key information about household, housing supply, and housing affordability characteristics that are most relevant for differentiating the potential impacts of the alternatives. For a more detailed analysis of housing needs in unincorporated King County, see the Housing Needs Assessment in Appendix B to the Public Review Draft of the 2024 King County Comprehensive Plan (Housing Needs Assessment). 129

4.3.2.1 Household Characteristics

As of 2020, unincorporated King County was home to 77,671 households. ¹³⁰ Most of these households (54,177 or 70 percent) live in the Rural Area, while the remainder (23,494 or 30 percent) live in unincorporated portions of the UGA, such as Skyway-West Hill and North Highline. About 18 percent of all households in unincorporated areas are renters, while 82 percent own their homes. In urban unincorporated King County, 63 percent of all households are homeowners, and in rural unincorporated

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¹²⁹ King County, Public Review Draft of 2024 Comprehensive Plan, Appendix B: Housing Needs Assessment, June 2023. [LINK]

¹³⁰ King County analysis of U.S. Census Bureau data, Tenure by Household Size by Units in Structure (B25009), 2016-2020 5-year American Community Survey, 2022.

King County, 91 percent of households are homeowners. For comparison, countywide, about 56 percent of households own their homes, while 44 percent rent. Among both groups, over half of all households have only one or two members, and over a quarter of households have four or more members, as shown in Figure 4.3-1, Unincorporated King County Households by Size and Tenure.

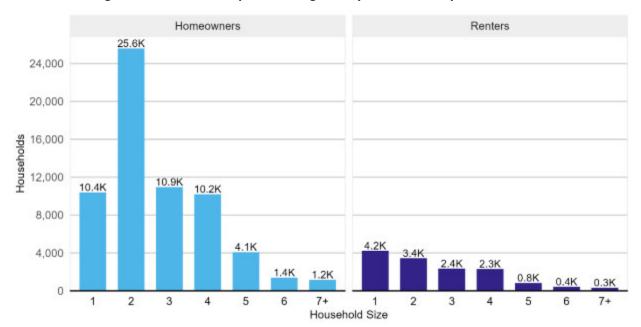


Figure 4.3-1. Unincorporated King County Households by Size and Tenure

Source: King County, Public Review Draft of 2024 Comprehensive Plan, Housing Needs Assessment, June 2023. [LINK]

4.3.2.2 Housing Supply

As of 2020, there were 82,196 housing units in unincorporated King County. ¹³¹ Figure 4.3-2, Housing Stock in Unincorporated King County by Units in Structure, shows the breakdown of this housing by units in structure. Over 80 percent of all homes in unincorporated King County are single detached homes, while less than 20 percent are other housing types, such as townhomes, duplexes, apartments, or manufactured homes. Single detached houses are typically the largest and most expensive of housing types, by unit. The lack of housing diversity in unincorporated King County limits the options available to meet the variety of housing needs that exist, particularly the need for smaller unit types that may provide more affordable options for smaller households that have just one or two members.

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¹³¹ King County analysis of U.S. Census Bureau data, Occupancy Status/Vacancy Rate, 2016-2020 5-year American Community Survey, 2022.

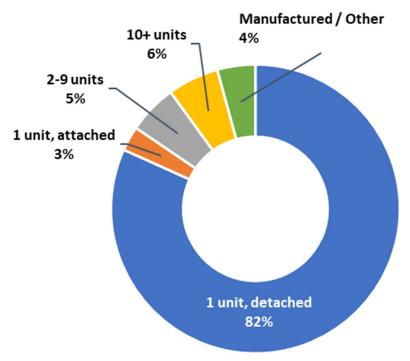


Figure 4.3-2. Housing Stock in Unincorporated King County by Units in Structure

Source: King County, Public Review Draft of 2024 Comprehensive Plan, Housing Needs Assessment, June 2023. [LINK]

As shown in Figure 4.3-3, Housing Stock in Unincorporated King County by Number of Bedrooms and Tenure, most owner-occupied homes have three or more bedrooms. Among homes occupied by renters, two- and three-bedroom units are most common. The supply of smaller units such as studios or one-bedroom is very limited, despite the fact that the majority of households in unincorporated King County have only one or two members.

There are some notable differences about housing in urban and rural portions of unincorporated King County, as reported in the Housing Needs Assessment. First, while the majority of all households in unincorporated King County are in the Rural Area, nearly two-thirds of all rental housing units are located in urban unincorporated areas. Additionally, the housing vacancy rate in urban unincorporated King County is only 3 percent compared to over 6 percent in the Rural Area. A healthy housing market has around a 6 percent vacancy rate. When the rate dips much below this level, competition for available housing can drive up rents and housing prices. This is likely contributing to the rapid growth in housing prices detailed in the following section.

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¹³² U.S. Census Bureau, Rental Unit Occupancy Status/Vacancy Rate, 2016-2020 5-year American Community Survey, 2022.

¹³³ U.S. Census Bureau, Occupancy Status/Vacancy Rate, 2016-2020 5-year American Community Survey, 2022.

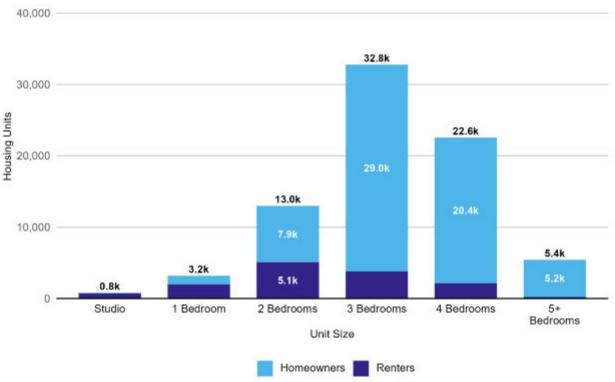


Figure 4.3-3. Housing Stock in Unincorporated King County by Number of Bedrooms and Tenure

Source: King County, Public Review Draft of 2024 Comprehensive Plan, Housing Needs Assessment, June 2023. [LINK]

An analysis of residential development in unincorporated King County between the years 2012 and 2018 found that over three-quarters of all new homes built were relatively low in density, less than 10 units per acre. This is the typical density level of suburban single detached housing production. During the study period, only 24 percent of all new homes built were at density levels typical of multifamily housing, such as townhomes or apartments. This indicates that recent housing production resembles the current housing stock rather than shifting to a more diverse housing supply in terms of unit types or size of homes.

4.3.2.3 Housing Affordability

Household Income

In 2022, the AMI in King County was \$134,600. This analysis groups households by income level relative to AMI for summarizing housing affordability and cost-burden status, as detailed below.

Incomes vary significantly across different parts of unincorporated King County. Urban unincorporated areas in south King County, including Skyway-West Hill and North Highline, have a much higher share of lower-income households compared to many rural and urban unincorporated areas on the east side of Lake Washington, as well as neighborhoods closer to Puget Sound and Lake Washington. See the Comprehensive Plan Housing Needs Assessment as well as Section 4.7, Socioeconomics and Environmental Justice, for more details about income disparities by geography, race, and ethnicity.

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¹³⁴ King County, Urban Growth Capacity Report, 2021. [LINK]

¹³⁵ HUD, Income Limits, 2022. [LINK]

Housing Costs

Between 2016 and 2022, median home sales prices countywide increased by about 50 percent to \$850,000.¹³⁶ A household would likely need to have an annual income well above the AMI in unincorporated King County to afford a house at that price.

Average rents in King County are somewhat more affordable than homeownership prices but are still higher than many low-income households can afford. In the fourth quarter of 2022, the average rent for a one-bedroom apartment was \$1,898, which was affordable for a household earning 78 percent AMI in 2022.¹³⁷

Housing Cost Burden

The U.S. Department of Housing and Urban Development classifies a household as cost-burdened if it is spending more than 30 percent of its income on housing costs and severely cost-burdened if it is spending more than 50 percent of its income on housing costs. ¹³⁸ In 2021, there were a total of 21,370 cost-burdened households in unincorporated King County, of which approximately 9,029 were severely cost-burdened (42 percent of all cost-burdened households). ¹³⁹

Figure 4.3-4, Cost-Burdened Households in Unincorporated King County by Income Level, compares moderately cost-burdened households (those spending between 30 percent and 50 percent of income on housing costs) to severely cost-burdened households. The majority of severely cost-burdened households have incomes below 50 percent of AMI. Table 4.3-1, Cost Burdened Households in Unincorporated King County by Income Level and Tenure, provides a more detailed summary of households by cost-burden status and tenure. About 50 percent of all renter households within unincorporated King County were cost-burdened, and nearly a quarter were severely cost-burdened. Among owner-occupied households, the rate of cost burden was much lower. When comparing urban and rural households in unincorporated King County, the Housing Needs Assessment found that urban households were more likely to be cost-burdened.

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¹³⁶ Washington Center for Real Estate Research, Washington State's Housing Market Report, 2022. [LINK]

¹³⁷ Ibid.; Washington State Housing Finance Commission publishes a table of affordable rents by apartment size that can be used to estimate affordability levels relative to AMI. [LINK]

¹³⁸ U.S. Department of Housing and Urban Development (HUD), Glossay of Terms to Affordable Housing, 2011. [LINK]

¹³⁹ King County analysis of HUD CHAS data, based on 2014–2018 American Community Survey 5-year estimates, 2021.

6,000 5,000 4,000 Moderately Cost-Burdened Households (30-50% of income) 3,000 Severely Cost-Burdened (>50% of income) 2,000 1,000 0 Extremely Low-Income Very Low-Income Moderate Income Above Median Income Low-Income (≤30% AMI) (30-50% AMI) (50-80% AMI) (80-100% AMI) (>100% AMI)

Figure 4.3-4. Cost-Burdened Households in Unincorporated King County by Income Level

Source: King County analysis of U.S. Department of Housing and Urban Development (HUD) Community Housing Affordability Strategy (CHAS) data, based on 2014–2018 American Community Survey 5-year estimates, 2021.

Table 4.3-1. Cost-Burdened Households in Unincorporated King County by Income Level and Tenure

	Owner Occupied			Renter Occupied		
Income Level Relative to AMI	Not Cost Burdened	Moderately Cost Burdened	Severely Cost Burdened	Not Cost Burdened	Moderately Cost Burdened	Severely Cost Burdened
0-30% AMI	333	399	2,209	579	655	2,169
30-50% AMI	1,415	1,280	1,430	453	1,314	1,269
50-80% AMI	2,735	1,515	970	1,044	1,210	129
80-100% AMI	2,814	1,324	285	1,290	650	25
100%+ AMI	34,530	3,695	543	4,679	299	0
All incomes	41,827	8,213	5,437	8,045	4,128	3,592

Source: King County analysis of HUD CHAS data, based on 2014–2018 American Community Survey 5-year estimates, 2021.

4.3.2.4 Displacement Risk

Rising housing costs in King County have contributed to housing insecurity and the risk of displacement. A household is economically displaced if they are compelled to move out because they can no longer afford the rent or housing costs. Physical displacement occurs when the landlord evicts the tenant or terminates the lease. This can happen if the property owner wishes to redevelop or rehabilitate an older property. Finally, cultural displacement occurs when residents are compelled to move because the people and institutions that make up their cultural community have left or are leaving the area. Many displaced households are forced to move further away from their jobs, schools, family, and/or community to find housing that is affordable to them. Others are forced into homelessness.

Not all households are equally vulnerable to displacement pressure, and the factors that contribute to displacement risks are not equitably distributed across the county. Therefore, PSRC developed a Displacement Risk Index that maps relative displacement risk at the Census tract level. Figure 4.3-5, Displacement Risk, shows this measure of relative displacement risk along with the boundaries of the UGA and the urban unincorporated area and Rural Area. Among unincorporated areas, the Displacement Risk Index is highest in North Highline. The County has also identified portions of Skyway-West Hill as challenged by high displacement risk.

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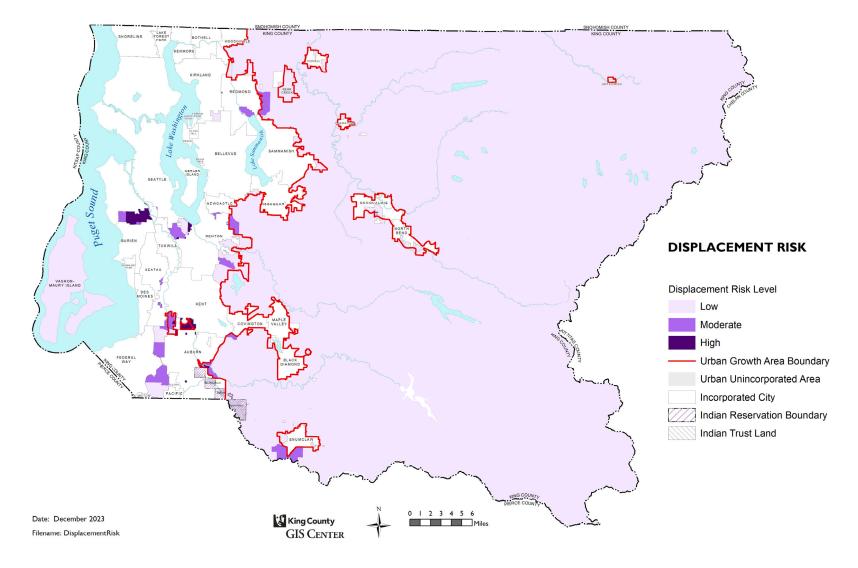


Figure 4.3-5. Displacement Risk

4.3.3 Environmental Consequences

4.3.3.1 No Action Alternative

Under the No Action Alternative, the county can expect to see a continuation of the recent housing affordability trends described in the Affected Environment section. According to the 2022 Comprehensive Plan Performance Measures Report, housing in the county is not keeping up with population and job growth and, while the overall cost burden of housing has decreased, it remains high and has increased for specific populations.¹⁴⁰

Unless there is a significant change in housing market conditions, both ownership and rental housing would continue to become less affordable over time. The rate of income-restricted housing production and preservation would not be expected to change significantly. Over time, recently adopted inclusionary housing incentives in Skyway-West Hill and North Highline could result in the development of some additional income-restricted units. But the rate of this new production would not be likely to keep pace with the high demand for affordable housing options.

As referenced in Section 4.3.1, Existing Policy and Regulatory Framework, new changes to the GMA require that King County adopt local development regulations that allow for and encourage the construction of ADUs within the UGA. This change has potential to impact future housing construction and increase the diversity of the housing supply under all alternatives, including the No Action Alternative.

4.3.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Both action alternatives include proposals that allow for additional density in some residential zones. These changes would allow for a wider diversity of housing types and sizes to be built within unincorporated areas compared to the No Action Alternative. This could help to increase the supply of apartments, townhomes, duplexes, triplexes, fourplexes, or cottage-style detached housing. In doing so, both action alternatives have the potential to provide King County residents with a wider variety of housing options that can address the needs of a wider variety of household types and income levels.

Both action alternatives also include new proposals, such as changes to the Residential Density Incentive Program and inclusionary housing, to encourage additional income-restricted affordable housing production. As a result, these alternatives have potential to increase the supply of housing affordable at or below 80 percent AMI compared to the No Action Alternative. These changes could provide more opportunity for low-income households to live in King County.

The action alternatives both consider additional regulations that limit or prohibit residential development near shorelines and the WUI. These impacts would be mostly limited to the Rural Area and urban unincorporated areas that border the Rural Area. While there would be some impacts to capacity for lower-density single detached residential development, these changes would mostly redirect housing development to other unincorporated areas.

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¹⁴⁰ King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

Both action alternatives include actions to facilitate the development of both permanent and temporary emergency shelters. These actions could result in increased development in urban unincorporated areas. However, neither action alternative is anticipated to have significant adverse impacts to housing.

Comparison of Action Alternatives

The primary difference between the action alternatives is the proposed scale and approach to increasing the diversity of housing options in unincorporated King County and increasing the supply of affordable housing.

Diversity of Housing Options

Both action alternatives include proposals to increase allowed densities within residential zones. Increasing density in unincorporated King County could increase the diversity of housing options available and support meeting the diverse housing needs of current and future King County residents of all income levels. This is because new apartments, condominiums, and middle housing types like townhomes, multiplexes, and ADUs can be provided at a much lower cost per unit than new, single detached homes. However, the changes considered in the Limited Change Alternative are modest and primarily impact the R-1 zone to allow for single detached homes on smaller lots than are currently allowed there. Additionally, this alternative would increase the allowed density near transit, potentially enabling larger multifamily or middle housing projects with more units.

The Extensive Change Alternative, on the other hand, would apply more substantial increases in allowed density to all residential zones. This has potential to allow for a greater diversity of housing options in areas that currently allow only single detached homes, thereby supporting a greater diversity of households and income levels in those areas. In areas near transit, this alternative would require high =-density housing and allow for the greatest increases in density. This change would have potential to create the greatest amount of new housing supply near transit and enable more households to save money on transportations costs.

Affordable Housing Supply

Among the proposals under consideration in the action alternatives, inclusionary housing has the greatest potential to impact the amount of new income-restricted affordable housing development. The Limited Change Alternative considers increases to the number of bonus units and development capacity allowed for projects that include affordable housing in locations where this incentive is currently available. In contrast, the Extensive Change Alternative considers expanding this incentive to all unincorporated areas and changing the current voluntary incentives to mandatory requirements. It also considers increasing bonuses and development capacity in areas where these inclusionary housing requirements apply.

These more substantial changes considered in the Extensive Change Alternative would have the potential to increase affordable housing production compared to the Limited Change Alternatives. However, the amount of affordable housing production would depend upon many factors and still requires private developers to choose to build the new housing. Finally, the Extensive Change Alternative would make it easier to build and operate both emergency and supportive housing, which could result in more housing and services for persons and households struggling with housing insecurity and homelessness.

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Displacement Risk

Proposals that increase development capacity also encourage redevelopment of parcels with older housing. In doing so, they may slightly increase the risk of physical displacement for some renter households. However, the extent of this impact is uncertain. For example, housing located near high-capacity transit would likely increase in value regardless of County actions to change zoning. So, owners of rental properties in these areas may choose to renovate these units and/or increase rents even without these changes. Furthermore, some of the proposals under consideration, such as mandatory inclusionary zoning, have the potential to make new housing development less profitable for private developers, thereby reducing the amount of redevelopment activity.

4.3.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to housing are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to housing.

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4.4 Parks, Open Space, and Recreation

This section discusses parks, open space, and recreation in King County and evaluates potential impacts to these resources associated with 2024 Update alternatives.

4.4.1 Existing Policy and Regulatory Framework

Some of the primary laws, regulations, and policies guiding parks, open space, and recreation in unincorporated King County include the following:

- K.C.C. Title 7, Parks and Recreation, which sets out requirements for designating parks, improving parks and recreation property, and establishing rules of use.
- K.C.C. Chapter 21A.37, King County TDR Program, which is a voluntary, incentive-based, and market-driven approach to preserve the Rural Area and Natural Resource Lands by directing growth into King County's Urban Area.
- K.C.C. Chapter 20.18, King County Four-to-One Program, which allows additional area to be added to the UGA in exchange for the conservation of open space, seeking to create a continuous band of open space along the UGA boundary.
- 2021 King County CPPs, which establish the framework for developing comprehensive plans, including the parks and open space element.
- King County Open Space Plan: Parks, Trails, and Natural Areas (Open Space Plan), which provides
 the policy framework for how the County plans, develops, manages, and expands its complex
 system of parks and open space and enables King County to be eligible for certain federal and
 state grants.
- King County Land Conservation Initiative, which is a regional collaboration between the County, cities, businesses, farmers, and environmental partners to develop strategy for protecting high conservation value lands and urban green spaces.

4.4.2 Affected Environment

The King County park and open space system consists of more than 200 parks, 175 miles of regional trails, 250 miles of backcountry trails, 32,000 acres of open space, and 150,000 acres of working forests and conservation easements countywide. Most park facilities in unincorporated King County are located to the east of major urban centers and in the foothills of the Cascade Range. See Figure 4.4-1, Open Space System, and Figure 4.4-2, Regional Trails System.

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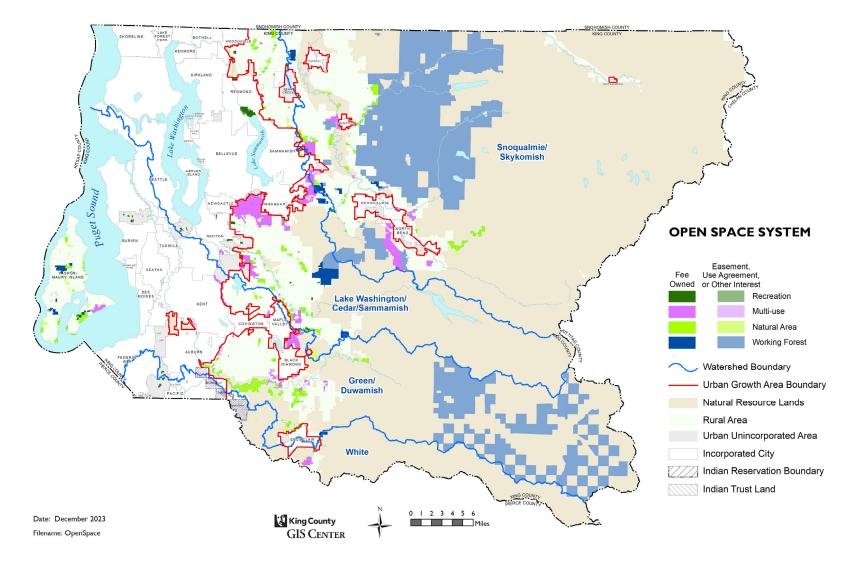
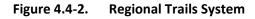
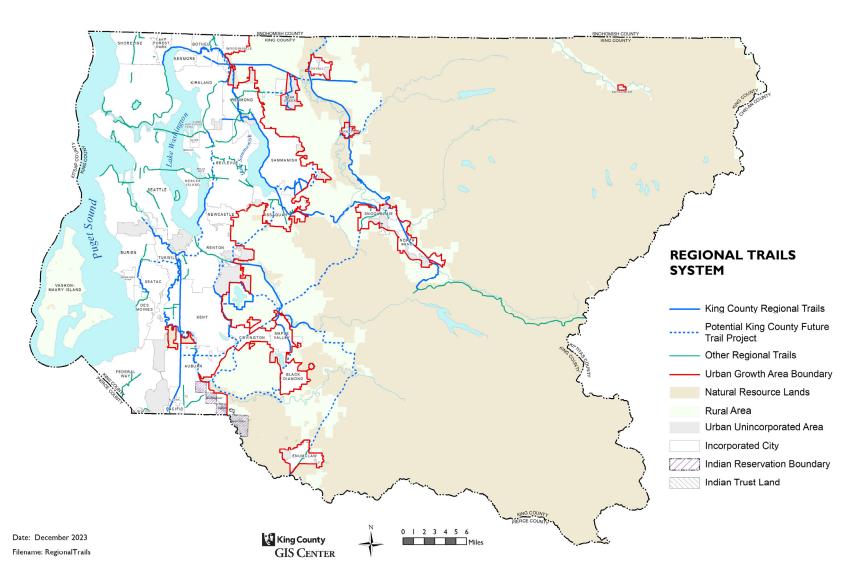


Figure 4.4-1. Open Space System





King County parks and open spaces support both active and passive recreation and are categorized as regional or local. Active recreation requires highly developed infrastructure to support a high intensity of use for organized recreation activities (e.g., an athletic field complex). Passive recreation has a lower intensity of use and requires minimal or no developed infrastructure for more informal recreation (e.g., hiking, biking). Regional recreation sites are larger sites that serve as destinations from longer distances and multiple jurisdictions from all over King County and beyond. Local recreation sites are smaller sites and facilities that serve the close-to-home park and recreation needs of a community or neighborhood. Regional recreation sites are owned and managed by the County, though some sites with both local and regional characteristics may be managed via a partnership between the County and cities or other agencies. Both regional and local parks and open space are further classified by type, described below in Table 4.4-1, King County Parks and Open Spaces: Classifications, Descriptions, and Examples.

Table 4.4-1. King County Parks and Open Spaces: Classifications, Descriptions, and Examples

Classification Type	Current Area (acres)	Description	King County Examples	
Recreation Sites	1,357 total (582 local and 775 regional)	Support both active and passive recreation opportunities and usually receive a higher level of public use.	Marymoor Park, Sixty Acres Park, White Center Heights Park	
Regional Trails	2,780 total	Primarily for nonmotorized use (e.g., pedestrians, bikes, horses) and can be soft surface (e.g., gravel, dirt), paved, or both.	Burke-Gilman Trail, Lake to Sound Trail, Sammamish River Trail	
Natural Areas	9,415 total (116 local and 9,299 regional)	Support natural features like wetlands, streams, ponds, riparian areas, forests, and other vulnerable or rare habitats.	Green River Natural Area, Moss Lake Natural Area, Upper Preston Natural Area	
Working Forests	146,631 total (all regional)	Preserve contiguous tracts of forest lands, contribute significant ecological benefits, and provide economic value.	Island Center Forest, Snoqualmie Forest, Sugarloaf Mountain Forest	
Multiuse Sites	14,612 total (702 local and 13,460 regional)	Lands that have ecological value and support passive and active recreation with less intensively developed facilities.	Cedar Creek Park, Black Diamond Open Space, Rattlesnake Mountain Scenic Area	

Source: King County, Open Space Plan: Parks, Trails, and Natural Areas – 2022 Update, 2022.

Note: Areas include fee and easement lands.

Approximately three-quarters of King County's parks and open spaces are regional. Of these, a majority of sites are located in the Rural Area (79 percent) and natural areas are the most common classification type. The other one-quarter of King County's parks and open spaces are local. Of these, about half are located in rural and urban unincorporated areas, and recreation sites are the most common classification type. Table 4.4-2, Regional and Local King County Parks and Open Spaces, shows the breakdown of all classification types and locations for both regional and local parks and open spaces.

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Table 4.4-2. Regional and Local King County Parks and Open Spaces

	Regional	Local
Classification Type		
Recreation Sites	16	30
Regional Trails	18	0
Natural Areas	92	6
Working Forests	18	0
Multiuse Sites	25	20
Location		
Urban	20	26
Rural	134	28
Urban/Rural	15	2
Total	169	56

Source: King County, Open Space Plan: Parks, Trails, and Natural Areas – 2022 Update, 2022. Note: Areas include fee and easement lands.

King County plans for and manages park and open spaces at a landscape level using the County's five major watersheds, which are briefly described below:

- Snoqualmie/Skykomish Rivers watershed: mostly unincorporated Natural Resource Lands that include large areas of working forests, some larger multiuse sites (e.g., Rattlesnake Mountain Scenic Area), and natural areas along the Snoqualmie River and its tributaries.
- Cedar/Sammamish Rivers and Lake Washington watershed: mostly urban incorporated areas with a couple large multiuse sites (e.g., Cougar Mountain Regional Wildland Park), recreation sites (e.g., Marymoor Park), and natural areas along the Cedar and Sammamish Rivers.
- Green/Duwamish River watershed: mostly urban incorporated areas with several smaller multiuse and recreation sites (e.g., Black Diamond Open Space) and natural areas along the Green River (e.g., Green River Natural Area).
- White River watershed: mostly urban unincorporated areas and Tribal lands (Muckleshoot Reservation) with some small multiuse and recreation sites (e.g., Pinnacle Peak Park).
- Vashon-Maury Island watershed: mostly rural unincorporated areas with several working forests (e.g., Island Center Forest) and natural areas (e.g., Maury Island Marine Park).

Open spaces benefit residents and the environment by absorbing pollution, improving air and water quality for humans and wildlife, and making living in these areas desirable. Starting in 2015, the County developed the Land Conservation Initiative to identify and conserve up to 65,000 acres of high-conservation-value lands, including urban green space, regional trails, natural lands, rivers, farmlands, and forests over a 30-year period. In order to address disparities in access to parks and open spaces, the Land Conservation Initiative Equity Framework identifies Opportunity Areas where households lack open space access and meet certain demographic criteria.

Specifically, Opportunity Areas are defined as households that have the lowest one-third median incomes and the highest one-third hospitalization rates and have no parks within 0.25 mile for those in the Urban Area or within 2 miles for those in the Rural Area. Although many of these Opportunity Areas are within incorporated cities, some are located within urban unincorporated King County, such as North Highline, Skyway-West Hill, and East Federal Way (Figure 4.4-3, Opportunity Areas).

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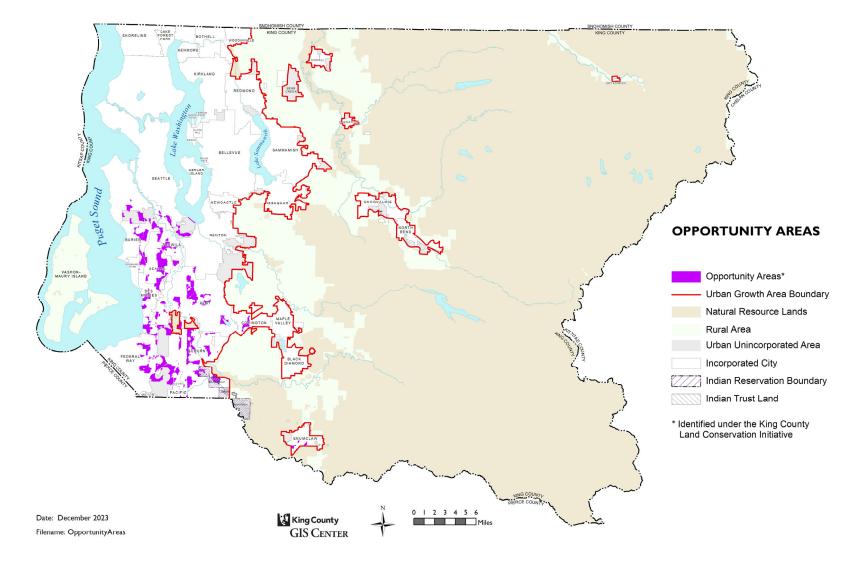


Figure 4.4-3. Opportunity Areas

4.4.3 Environmental Consequences

4.4.3.1 No Action Alternative

As the King County population continues to grow and shift, the use of existing public recreational spaces will intensify and there will be additional demand for new parks, trails, and open spaces. Additionally, demand for outdoor recreation increased dramatically during the first years of the COVID-19 pandemic and is expected to continue. According to the 2022 Comprehensive Plan Performance Measures Report, priority open space lands have increased nearly 4,000 acres since 2016, and 79 percent of King County residents live near a park or open space amenity. However, 49 percent of urban unincorporated residents have limited access to nearby parks and open space, and Black, Hispanic and Latinx, and Native Hawaiian and Pacific Islander residents have lower access to nearby parks and open spaces. These trends are expected to continue under the No Action Alternative.

Under the No Action Alternative, the King County Open Space Plan along with other County initiatives (such as the Four-to-One Program; TDR Program; Clean Water, Healthy Habitat Strategic Plan; SCAP; Land Conservation Initiative; and 30-Year Forest Plan) would collectively work to expand the open space system and remove barriers to public access to parks, natural areas, and outdoor recreation. This cooperative effort would need to be maintained and stewarded as population growth intensifies the use of existing public recreational spaces and creates additional demand for new parks, trails, and open spaces and greater maintenance needs for existing resources.

4.4.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Generally, both action alternatives seek to expand and improve access to local parks and green spaces through possible changes to the Four-to-One Program, the TDR Program, and the Conservation Futures Fund. To varying degrees, both action alternatives would increase green space and parks in underserved communities, including in Opportunity Areas, acquire land for habitat restoration, and protect tree canopy.

Both action alternatives propose improved access to open spaces and public recreational facilities to all county residents and address disparities in park distribution and access through changes in policies and regulation. Expanding green and open spaces within and near residential areas, especially in areas where greater disparities exist due to historic and ongoing underinvestment, can improve public health and help build equitable communities. Neither action alternative is anticipated to have significant adverse impacts to parks, open space, or recreation resources.

Comparison of Action Alternatives

The main difference between the action alternatives is how aggressively they pursue changes that can support progress towards the 2024 Update objectives. For example, both action alternatives would make modifications to the Four-to-One Program, although the modifications under the Limited Change Alternative would not change the program requirements substantively and, therefore, are not expected to have any adverse impacts to open space conservation. The Extensive Change Alternative, however, would allow substantive changes to program requirements for both the open space component (i.e., the

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¹⁴¹ King County, King County Open Space Plan: Parks, Trails, and Natural Areas, 2022. [LINK]

¹⁴² King County, 2022 Comprehensive Plan Performance Measures Report, 2022. [LINK]

"four") and the development component (i.e., the "one"), including a reduced open space ratio, noncontiguous open space, urban-serving facilities in the Rural Area, and nonresidential development. While not significant, these changes could reduce the amount of land conserved under the Four-to-One Program for open space and increase the amount of development adjacent to the UGA boundary as compared to the No Action or Limited Change alternatives.

The Limited Change Alternative would encourage increasing open space in urban unincorporated areas, while the Extensive Change Alternative would require the County to provide local parks and green spaces in the urban unincorporated areas of King County, including areas such as East Federal Way, North Highline, Skyway-West Hill, Fairwood, and East Renton. New or additional park and open spaces areas would likely be local parks, as opposed to regional parks, since their primary purpose would be to serve local, urban unincorporated areas.

Encouraging parks and green spaces in urban unincorporated areas may provide easier access to more residents who live in Opportunity Areas (see Figure 4.4-3, Opportunity Areas). While the Limited Change Alternative encourages access to local parks and green spaces in Opportunity Areas, the Extensive Change Alternative would require the County to improve access to parks and green spaces in Opportunity Areas where greater disparities exist due to historic and ongoing underinvestment. Expanding access to public spaces, recreational facilities, and trail access within and near Opportunity Areas would help address the County's goal of improving equitable access to parks, open space, and recreational resources. The Extensive Change Alternative would allow the County to reach that goal faster than the Limited Change Alternative.

Another difference between the two action alternatives is the open space that would be provided by new development projects. The Limited Change Alternative encourages open space inclusion in new development plans while the Extensive Change Alternative requires open space inclusion in new development plans.

4.4.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to parks, open space, and recreation are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to parks, open space, and recreational resources.

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4.5 Historic and Cultural Resources

This section discusses historic and cultural resources in King County and evaluates potential impacts to these resources that may be associated with the 2024 Update alternatives.

4.5.1 Existing Policy and Regulatory Framework

Some of the primary federal, state, and local laws, regulations, and policies guiding historic and cultural resources in unincorporated King County include the following:

- National Historic Preservation Act (16 USC 470 et seq.), which requires agencies involved in a federal undertaking to consider the undertaking's potential effects to historic properties.
- Chapter 27.53 RCW, Archaeological Sites and Resources, which prohibits knowingly disturbing
 historic or prehistoric archaeological resources or sites located on public and private land
 without an archaeological permit from the Washington State Department of Archaeology and
 Historic Preservation.
- Chapter 27.44 RCW, Indian Graves and Records Act, which prohibits knowingly disturbing Indian burial sites, cairns, and glyptic markings located on public and private land.
- Chapter 68.60 RCW, Abandoned and Historic Cemeteries and Historic Graves Act, which outlines steps to restore, maintain, and protect historical cemeteries and graves.
- K.C.C. Chapter 20.62, Protection and Preservation of Landmarks, Landmark Sites, and Districts, which established the Landmarks Commission, whose goal is to ensure that the historic places, material culture, and traditions which best reflect the region's 13,000 years of human history are preserved for future generations.
- 2021 King County CPPs, which include policies promoting historic preservation and cultural awareness, as well as other related policies.
- King County Executive Policy LUD 16-1-1-EP, which requires all County departments/divisions to
 consider protection and management of cultural resources in project planning and identifies the
 County as responsible for ensuring compliance with Chapter 27.53 RCW for projects that are
 initiated or permitted by the County and do not have a state or federal nexus.

4.5.2 Affected Environment

Archaeological, ethnographic, and historical investigations completed over the past several decades provide a regional context for the archaeological record in King County. In 2016, an archaeological chronologic sequence was developed for King County based on existing cultural history and selectionist and evolutionary ecological studies of western Washington.

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¹⁴³ Carlson, R.L., Cultural Antecedents in *Handbook of North American Indians, Volume 7: Northwest Coast*, edited by W. Suttles, 1990, pp. 60–69; Greengo, R.E. (editor), *Prehistoric Places on the Southern Northwest Coast*, 1983; Larson, L.L., and D.E. Lewarch (editors), *The Archaeology of West Point, Seattle, Washington: 4,000 Years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound*, 1995; and Nelson, C.M., Prehistory of the Puget Sound Region in *Handbook of North American Indians, Volume 7: Northwest Coast*, edited by W. Suttles, 1990, pp. 481-484.

¹⁴⁴ Kopperl, R. et al., *Archaeology of King County, Washington: A Context Statement for Native American Archaeological Resources*, 2016.

Human history in western Washington corresponds with the most recent retreat of glacial ice in the region, approximately 14,000 years Before Present (BP). Descendants of these earliest inhabitants of King County include members of the present-day Duwamish Tribe, Muckleshoot Indian Tribe, Snoqualmie Tribe, Suquamish Tribe, Puyallup Tribe of Indians, and Tulalip Tribes. Over the next 6,000 years, Native peoples lived in small, mobile groups that moved seasonally between productive hunting, fishing, and gathering locations. Archaeological evidence dating to immediate postglacial periods is limited to isolated stone tools such as spear points, typically found on upland drift plains. Beginning around 8,000 to 3,000 years BP, Native peoples established a broader range of residential and resource procurement site types and sizes in various settings including on upland glacial landforms, in lowland river valleys, and along marine shorelines. Harvest of and occupation near coastal and nearshore resources—activities that often produced sizable shell middens—emerged approximately 4,500 years BP. The expansion in site type and size during this era coincided with decreased mobility as Native groups developed specialized adaptations to local environments.

After around 3,000 years BP, the archaeological record is characterized by diverse site and artifact types located in a range of environments. Semi-permanent winter village sites appear for the first time. Villages contained large shed- or gable-roofed plank houses built along marine shorelines and major waterways. During the non-winter months, Native peoples established single- and multiple-resource acquisition camps in lowland and upland areas. They harvested an array of plant and animal foods, and some sites, especially large coastal shell middens, exhibit evidence of intensive collection of resources such as salmon and shellfish.

The arrival of Euro-Americans in the Pacific Northwest in the late 18th century marked the beginning of the ethnographic period, when historic documentation supplements archaeological data for our knowledge of past Indigenous land use in the county. The establishment of the Pacific fur trade, and later the transformation of Washington and Oregon into U.S. settler colonies, upended regional demography and ecology. Native peoples grappled with the impacts of introduced diseases and nonnative plants and animals, and land seizure and removal policies. Amid these changes, Native peoples acquired new materials and adapted settlement and subsistence practices to emerging economic opportunities and settler incursion. Beginning around 1850, Native people and non-Native newcomers established new archaeological site types, including forts, logging camps, industrial areas, and urban centers. Materials and structures associated with these sites dominate the archaeological record of the late 19th and 20th centuries.

4.5.2.1 Historic, Built-Environment Resources

Historic built environment resources have been identified in a variety of urban and rural settings throughout unincorporated King County. As of August 2023, the King County and City Landmarks List includes 62 King County Landmarks, 13 King County Bridges, and eight Community Landmark Heritage

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¹⁴⁵ Before Present (BP) is a time scale often used in archaeology, geology, and other scientific disciplines to specify when events occurred relative to the origin of practical radiocarbon dating in the 1950s. It uses January 1, 1950, as the commencement date of the age scale.

¹⁴⁶ Kopperl, R. et al., 2016.

¹⁴⁷ Boyd, R.T., The Coming of Spirt and Pestilence: Introduced Diseases and Population Decline among the Northwest Coast Indians, 1774–1874, 1999.

¹⁴⁸ Wilson, D.C., The Fort and the Village: Landscape and Identity in the Colonial Period of Fort Vancouver in *British Forts and Their Communities*, edited by C.R. DeCorse and Z.J.M. Beier, 2018, pp. 91-125.

Corridors in unincorporated King County. ¹⁴⁹ There are also 43 historic districts, sites, buildings, or objects that are listed on the National Register of Historic Places and/or the Washington Heritage Register, and 33 barns listed on the Washington Heritage Barn Register in unincorporated King County. ¹⁵⁰ These listings include archaeological sites, historic infrastructure and settlements, farms, and residences, and one cultural landscape. The County also maintains a historic resource inventory that consists of more than 3,000 properties that may be historically significant and eligible for County landmark designation or the National Register of Historic Places.

4.5.2.2 Archaeological Resources

As of August 2023, nearly 1,700 archaeological sites are recorded in King County in the Washington Information System for Architectural and Archeological Records Data, which is maintained by the Department of Archaeology and Historic Preservation. Under RCW 42.56.300(1) and (2), specific locations of archaeological sites, historic sites, artifacts, or the sites of traditional religious, ceremonial, or social uses and activities of affected Tribes are exempt from disclosure to prevent the looting or depredation of such sites.

The Department of Archaeology and Historic Preservation maintains a predictive model that uses environmental data associated with documented archaeological sites to identify areas at which undocumented sites may be found. A county-specific archaeological sensitivity model was also developed as a part of an archaeological context statement for King County.¹⁵¹ In both models, areas of unincorporated King County with a higher probability for archaeological sites are typically located along shorelines, in river valleys, and areas with relatively level, open terrain. However, it is worth noting that archaeological sites have been recorded in unincorporated King County on diverse landforms from the shoreline of Puget Sound on Vashon-Maury Island to the crest of the Cascade Range, including in locations not flagged as high probability by the predictive models.

4.5.3 Environmental Consequences

4.5.3.1 No Action Alternative

Under the No Action Alternative, development under the Current Plan has the potential to affect historic and cultural resources as any ground-disturbing activity would. Archaeological sites may be impacted by ground disturbance associated with construction. Historic structures may be modified, demolished, or subjected to increased stress. Traditional cultural places and cultural landscapes may be impacted by changes to viewsheds or circulation patterns. However, the Current Plan contains several policies that seek to guide development in a way that preserves historic and cultural resources, as does existing County code and policy.

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¹⁴⁹ King County and City Landmarks List, last update November 2021. [LINK]

¹⁵⁰ The Department of Archaeology and Historic Preservation (DAHP), Washington Information System for Architectural and Archeological Records Data, 2023. [LINK]

¹⁵¹ Kopperl et al. 2016.

4.5.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Neither of the action alternatives includes changes to policies in the Current Plan that pertain directly to historic and cultural resources, but any development, including under both alternatives, has the potential to affect historic and cultural resources. The action alternative proposals that would affect historic and cultural resources include those that seek to increase the amount of land that is preserved for conservation, reduce housing and business displacement, expand housing options, and reduce greenhouse gas emissions. However, no significant adverse impacts to historic and cultural resources are anticipated under either action alternative.

Comparison of Action Alternatives

In general, proposals that encourage more dispersed growth pose greater risk to historic and cultural resources, while those that encourage retention of existing buildings and open spaces have the potential to benefit historic and cultural resources. The types of changes proposed in the Extensive Change Alternative are generally of greater magnitude in terms of the potential risks and benefits to historic and cultural resources than those included in the Limited Change Alternative.

Under the Limited Change Alternative, increased bonuses and development capacity for inclusionary housing where it is already allowed may generate impacts to cultural and historic resources more than the No Action Alternative. The expansion of inclusionary housing or requiring mandatory inclusionary housing in all unincorporated areas under the Extensive Change Alternative has the potential to create more intense development in rural and urban areas. This would concentrate the potential impacts to historic and cultural resources from such development within smaller areas relative to both the No Action Alternative and the Limited Change Alternative.

Similarly, allowing some additional high-density housing near transit and development through minor upzones under the Limited Change Alternative may lead to more development with potential for slightly greater impacts to historic and cultural resources in those locations relative to the No Action Alternative. Requiring a higher minimum density for housing in all areas near transit and employment under the Extensive Change Alternative has potential to generate greater impacts to cultural and historic resources within those areas as compared to the Limited Change Alternative and the No Action Alternative, but may reduce development pressure and the accompanying risks to cultural and historic resources elsewhere in the county.

While the Limited Change Alternative calls for supporting the use of renewable energy, which is unlikely to generate any more impacts to cultural and historic resources than the No Action Alternative, the Extensive Change Alternative entails adopting regulations and programs that reduce energy use and phase out fossil fuel use. Developing new energy facilities such as wind or solar farms requires large areas of land and would likely cause greater impacts to cultural and historic resources than either the No Action Alternative or the Limited Change Alternative.

The minor procedural modifications to the Four-to-One Program proposed under the Limited Change Alternative would not cause any greater impacts to cultural and historic resources than the No Action Alternative. Updating the Four-to-One Program to allow a reduced open space ratio under the Extensive Change Alternative would have the potential to cause greater impacts to cultural and historic resources than the No Action and Limited Change alternatives, since it allows for more area to be converted to urban relative to the area required to remain open space.

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Minor procedural changes to the TDR Program under the Limited Change Alternative are not anticipated to cause impacts to cultural and historic resources that are any different from the No Action Alternative. Expanding TDR incentives and allowing TDR sending sites in new areas, as proposed under the Extensive Change Alternative, has the potential to conserve more land, with lower impacts to cultural and historic resources than under the No Action and Limited Change alternatives.

4.5.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to historic and cultural resources are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to historic and cultural resources.

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4.6 Transportation

This section discusses the transportation system in King County, including roadways, public transit, nonmotorized transportation, and marine, rail and air travel, and evaluates potential impacts to these resources that may be associated with the 2024 Update alternatives.

4.6.1 Existing Policy and Regulatory Framework

4.6.1.1 Policy and Regulations

Transportation in unincorporated King County is primarily guided by the following laws, regulations, and policies:

- Title 47 RCW, Public Highways and Transportation, which sets out state legislative policies, regulations, and laws related to statewide transportation facilities, including state highway and roadways, freight corridors, state ferry systems, multimodal programs, as well as other transportation-related activities.
- K.C.C. Title 14, Roads and Bridges, which sets out policies and regulations and laws related to King County transportation facilities, including traffic control, road standards, right-of-way requirements, nonmotorized transportation, concurrency, intersection standards, amongst other items.
- King County Metro Strategic Plan for Public Transportation 2021–2031, which establishes goals
 for the King County Metro Transit Department (Metro), as well as objectives, outcomes, and
 strategies to achieve them and measures to track progress.
- King County Metro Service Guidelines, which informs Metro's evaluation, design, and modification of transit services.
- King County Metro Connects, which is Metro's vision for improving mobility services over the next 30 years through additional, frequent, reliable, and fast service through an innovative regional and integrated mobility network.
- King County Strategic Plan for Road Services, which guides the planning, development, and implementation of the unincorporated road system.
- King County International Airport Strategic Plan, which guides the planning, development and implementation of the airport facilities and services.
- 2021 King County CPPs, which establish the framework for developing comprehensive plans, including the transportation element.
- PSRC Regional Transportation Plan, which outlines and supports regional growth strategy built
 around the concept that additional infrastructure and services are to be provided in areas that
 accept an increased share of the region's growth. Additionally, it promotes the concept of
 maximizing mobility choices through a multimodal approach to moving people, goods, and
 services efficiently within and beyond the region.

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4.6.1.2 Transportation Concurrency and Level of Service

The Department of Local Services Road Services Division administers King County's Transportation Concurrency Program, which began in 1995. The program is mean to ensure that sufficient transportation facilities are in place to support new development. Under the program, unincorporated King County is divided into 13 travel sheds, which are areas where travel patterns share common characteristics; see Figure 4.6-1, Transportation Concurrency Travel Shed Boundaries. Of the 13 travel sheds, seven are rural (labelled 1 through 7) and six are urban (labelled A through F).

Every 2 years, or when directed by the King County Council, travel time data is collected for the principal and minor arterials within each travel shed and evaluated against their Level of Service (LOS) standards to calculate the percentage of failing arterial segments within each travel shed. If more than 15 percent of tested miles of roadway within a travel shed fail their LOS standard, then the travel shed fails the concurrency test and the travel shed is subject to development restrictions, unless necessary enhancements can be constructed to maintain LOS standards.

King County uses average travel speeds to define LOS standards for principal and minor arterial road classifications as defined in K.C.C. 14.70.220. There are different LOS standards for urban areas than for the Rural Area. Additionally, mobility areas established in the Rural Area and selected rural neighborhood commercial centers have their own LOS standard. Specific LOS standards for county roads are summarized in Table 4.6-1, County Road Level of Service Standards.

State routes, including Highways of Statewide Significance and highways of regional significance, are not included in concurrency calculations. Highways of Statewide Significance in the County's concurrency areas, which include Interstate 5 (I-5), Interstate 90 (I-90) and portions of State Route (SR) 99, are explicitly exempt from concurrency, while regionally significant routes, which include all other state routes, have LOS standards adopted into the PSRC Regional Transportation Plan.

Table 4.6-1. County Road Level of Service Standards

County Road Areas	LOS Standard
Urban Area	Е
Rural Area and Natural Resource Lands	В
Certain Minor Residential and Minor Commercial Development, Certain Public and Educational Facilities	F
Rural Mobility Areas (Rural Towns)	E
Rural Neighborhood Commercial Centers (Cottage Lake, Preston, Cumberland)	D

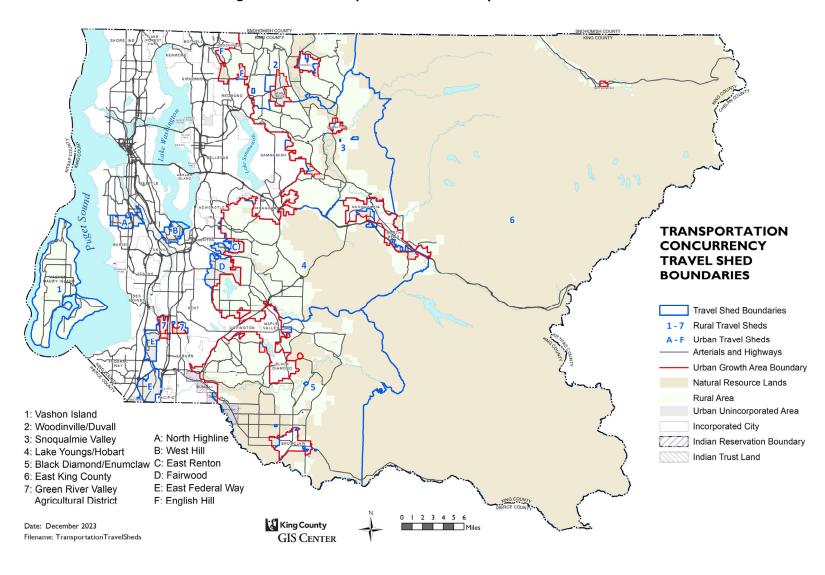


Figure 4.6-1. Transportation Concurrency Travel Shed Boundaries

4.6.2 Affected Environment

This section describes the existing transportation system in King County, including highways and roadways, public transit, rail, nonmotorized transportation, and air travel. Some information is provided at a countywide level, while other sections only discuss the unincorporated area.

4.6.2.1 State and Federal Highways

The highway system in Washington consists of a comprehensive network of federal and state facilities, including interstate, U.S., and state highways maintained by the Washington State Department of Transportation (WSDOT). King County is served by four federal highways (interstates and U.S. routes) and 23 state routes that serve mobility needs within and beyond the county, as shown in Figure 4.6-2, Highways.

WSDOT tracks vehicle miles traveled on federal and state facilities in King County and reports the data at the countywide scale. In 2022, approximately 14 million vehicle miles were traveled along interstate highways in King County each day (on average); approximately 9 million vehicle miles were traveled along U.S. routes and state routes combined in King County each day (on average).¹⁵²

Of particular importance are the Highways of Statewide Significance, which encompass interstate highways and other state principal arterials crucial for connecting major communities across the state. The Highway of Statewide Significance designation plays a vital role in guiding the allocation and direction of funding for these essential transportation routes, ensuring the efficient and effective movement of people and goods throughout the region. The Highways of Statewide Significance located wholly or partially within King County include US 2, SR 522, SR 520, SR 518, SR 509, SR 99, SR 18, SR 167, SR 164, SR 169, I-405, I-5, and I-90.

Washington State Scenic and Recreational Highways

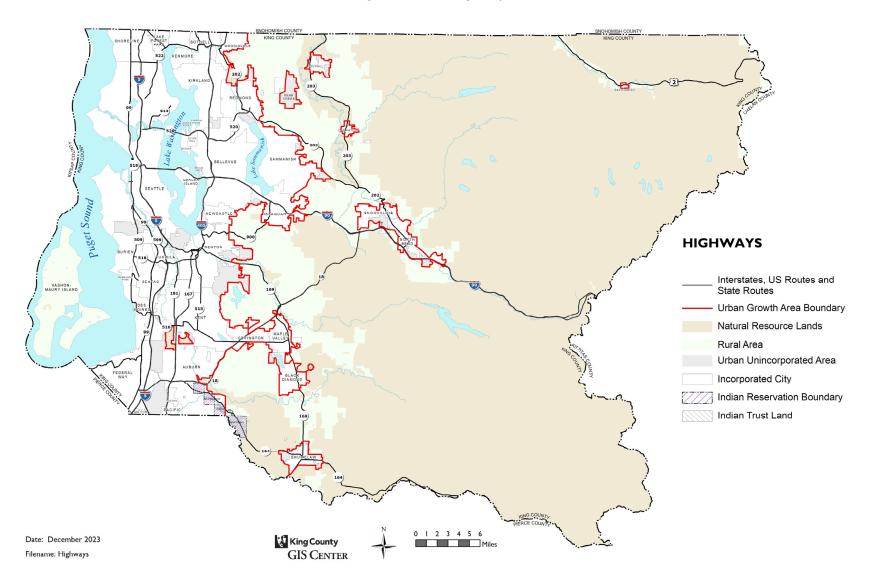
Within King County exists a network of approximately 100 miles of designated Scenic and Recreational Highways, aimed at promoting the region's natural beauty and recreational opportunities. Notable among these are portions of I-90, known as the Mountains to Sound Greenway; US 2, referred to as the Stevens Pass Greenway; SR 410, recognized as the Chinook Pass Scenic Byway; and SR 202, known as the Cascade Valleys Scenic Byway.

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¹⁵² WSDOT, Annual mileage and travel information, 2023. [LINK]

¹⁵³ King County, 2024 King County Comprehensive Plan Public Review Draft, Appendix C: Transportation, June 2023. [LINK]

Figure 4.6-2. Highways



4.6.2.2 Unincorporated King County Roads

The Roads Services Divisions manages approximately 1,500 miles of County-owned roadways, which support over 1 million trips per day. King County maintains an inventory of assets that includes bridges, sidewalks, pathways, bicycle facilities, guard rails, drainage facilities, traffic control equipment, and traffic cameras. As of fall 2022, the County-owned unincorporated area road system included approximately: 155

- 1,467 miles of roadway.
- 185 bridges, including several jointly owned with cities.
- 275 miles of sidewalks.
- 723 marked crosswalks.
- 79 traffic signals.
- 47,000 traffic control signs.
- 58 traffic cameras.
- 118 miles of protective guardrail.
- 4.6 million linear feet of drainage ditch.
- 3.5 million linear feet of drainage pipes.

The Roads Services Division faces an increasing maintenance backlog, due to aging infrastructure, greater demands on the transportation network, and structural deficiencies in funding. As a result, County-owned transportation infrastructure is in a state of decline, near or past its design life, and at risk of failure. In addition, this under-investment in transportation infrastructure in urbanized areas has contributed to inequities in traditionally underserved communities.¹⁵⁶

King County Arterial Functional Classifications

The Roads Services Division classifies arterial roadways within the county into groups according to the function each road serves or is intended to provide. The arterial functional classifications consider roadway characteristics such as lane capacity and average daily traffic volumes along the roadway.

In unincorporated King County, there are three types of arterial functional classifications:

- Principal Arterials.
- Minor Arterials.
- Collector Arterials.

The classification system and King County Road Standards are used to distinguish between different types of roads for planning purposes, road design, and the allocation of public funds for transportation

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¹⁵⁴ King County, Road Services Division 2021-2022 Business Plan, 2020. [LINK]

¹⁵⁵ King County, 2024 King County Comprehensive Plan Public Review Draft, Appendix C: Transportation, June 2023. [LINK]

¹⁵⁶ King County, Road Services Division 2023-2024 Business Plan, 2023. [LINK]

improvements. The current adopted Arterial Classifications are shown in Figure 4.6-3, Regional Arterial Functional Classification.

The county road network is largely rural; nearly 75 percent of county road miles are located outside the UGA. Principal arterials comprise approximately 7 percent of total network miles, minor arterials comprise approximately 9 percent, and collector arterials comprise 14 percent. Most of the network—70 percent—consists of local roads. Within the Urban Area, local roads comprise a greater share of the road network—nearly 80 percent—reflecting the denser, more grid-based urban transportation network.

Transportation Concurrency Test Results

The Roads Services Division completed a Transportation Concurrency update in 2022. As shown in Table 4.6-2, 2022 Transportation Concurrency Test by Travel Shed, all six urban travel sheds (ID A through F) and all seven rural travel sheds (ID 1 through 7) received a rating of "pass." Of the 13 travel sheds, eight had no roadway segments within the travel shed exceeding the LOS standard. Five travel sheds (Vashon, Woodinville/Duvall, Snoqualmie Valley, Lake Youngs/Hobart, and North Highline) had some portion of the existing roadway segments exceeding the LOS standard, but all of those had less than 15 percent of roadway segments exceeding the standards.

Table 4.6-2. 2022 Transportation Concurrency Test by Travel Shed

ID	Travel Shed Name	Location Type	Total Mileage	Failed Mileage	Percent of Travel Shed Failing	Travel Shed Results
1	Vashon	Rural	26.62	1.22	5%	PASS
2	Woodinville/Duvall	Rural	36.74	3.42	9%	PASS
3	Snoqualmie Valley	Rural	22.90	0.22	1%	PASS
4	Lake Youngs/Hobart	Rural	39.81	1.44	4%	PASS
5	Black Diamond/Enumclaw	Rural	61.44	0.00	0%	PASS
6	East King County	Rural	0.00	0.00	0%	PASS
7	Green River Valley	Rural	1.94	0.00	0%	PASS
Α	North Highline	Urban	7.14	0.29	4%	PASS
В	West Hill	Urban	3.97	0.00	0%	PASS
С	East Renton	Urban	1.69	0.00	0%	PASS
D	Fairwood	Urban	8.28	0.00	0%	PASS
Е	East Federal Way	Urban	11.84	0.00	0%	PASS
F	English Hill	Urban	1.55	0.00	0%	PASS

Source: King County, Road Services Division 2022 Transportation Concurrency Update Report, 2022. [LINK]

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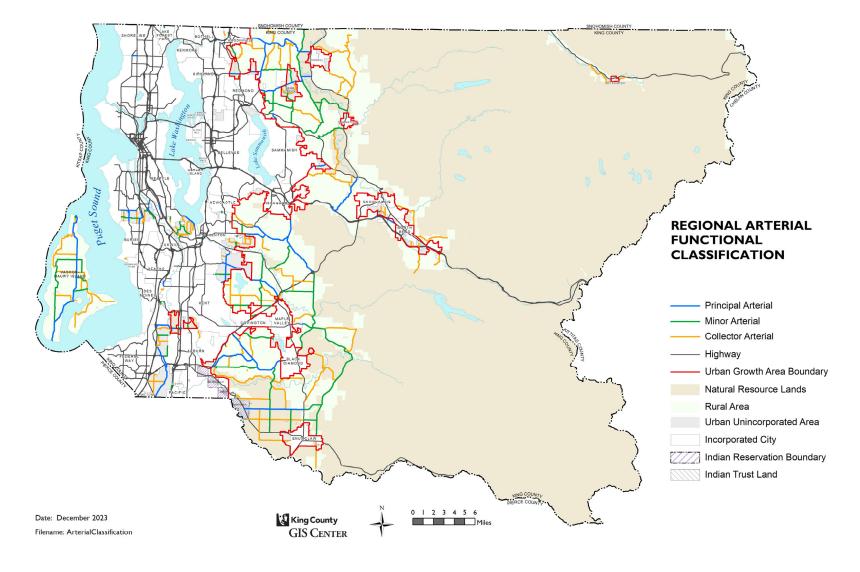


Figure 4.6-3. Regional Arterial Functional Classification

4.6.2.3 Public Transit

Public transit services in King County are managed by four public transit agencies. The primary provider, King County Metro, offers a wide array of transit services, including regular bus services, RapidRide bus rapid transit, fixed-route transit, paratransit, vanpools, water taxi service, and flexible mobility solutions for residents. Pierce Transit and Community Transit operate commuter bus services that connect urban centers in Pierce County and Snohomish County to select urban centers within King County, such as downtown Seattle, downtown Bellevue, the University District in northeast Seattle, and Federal Way in South King County.

Sound Transit is responsible for regional High-Capacity Transit across sections of King, Pierce, and Snohomish counties. This is facilitated through commuter rail (Sounder), light rail (Link), and a regional express bus network (ST Express). Within King County, Link light rail and ST Express bus operations are presently managed and maintained by King County Metro under the jurisdiction of Sound Transit, as is the operation of the Seattle Streetcar.

In fall of 2023, King County Metro's transit network includes over 156 bus routes and approximately 7,400 bus stops. In 2022, Metro facilitated around 3.7 million annual service hours dedicated to fixed route and Dial-a-Ride Transit (DART) services, exclusive of Sound Transit and flexible services. ¹⁵⁷

Metro's fleet, as of 2022, consists of over 1,400 fuel-efficient buses. The County also operates 115 park-and-ride facilities, which collectively provide a total of 26,065 vehicle spaces for commuters and residents. ¹⁵⁸ A summary of the public transit ferry service provided within King County is provided in Section 4.6.2.5, Marine Transportation.

Public transit service provision is most robust in dense urban areas, which are typically located in incorporated areas of the county. As of 2023, unincorporated King County is served by Metro fixed-route service, one RapidRide bus rapid transit line through urban unincorporated North Highline, paratransit, vanpools, water taxi service to Vashon-Maury Island, and flexible mobility solutions (Metro Flex). Sound Transit provides one regional express bus route through North Highline.

In 2020, Metro's unincorporated area transit network included 23 Metro bus and DART routes; an estimated 12 percent of Metro's budgeted annual service hours were dedicated to fixed-route and DART services directly serving the unincorporated area, exclusive of Sound Transit and flexible service. As of 2023, King County manages 14 park-and-ride facilities in unincorporated King County providing a total of 602 parking spaces.

4.6.2.4 Nonmotorized Transportation

Roadside Nonmotorized Transportation Facilities

The Road Services Division constructs and maintains nonmotorized transportation facilities, including bicycle lanes, sidewalks, and road shoulders on unincorporated County roads. These facilities also include crosswalks, traffic signals, pavement markings, and signage to support safe nonmotorized and active transportation.

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¹⁵⁷ King County, 2024 King County Comprehensive Plan Public Review Draft, Appendix C: Transportation, June 2023. [LINK]

¹⁵⁸ Ibid.

As of 2021, the pedestrian facilities within the unincorporated King County road system includes approximately 335 miles of existing sidewalks, paved shoulder walkways, and paved separated walkways; 5,194 existing curb ramps; and 436 pedestrian pushbuttons for signal activation.¹⁵⁹

Bicycle Parking at Transit Facilities

King County has equipped its park-and-ride lots and transit centers with bicycle racks and/or bicycle lockers for people to store their bicycles while accessing transit services. Bicycle parking and secure storage support transit ridership and overall mobility by increasing options for people to connect to bus service or to transition to carpool or vanpool. Currently, Metro provides one secure bike parking location in unincorporated King County.

Regional Trails Network

The regional shared-use path network extends broadly across both incorporated and unincorporated King County, establishing connections between various cities, other counties within the Central Puget Sound region, and other regions within the state. This interconnected network, including trails such as the Snoqualmie Valley Trail (and connecting Palouse to Cascades State Park Trail), John Wayne Trail, and Burke-Gilman Trail, spans beyond 30 cities within King County and is extensively used for nonmotorized transportation and recreational activities. King County manages approximately 175 miles of the comprehensive 300-mile network of multipurpose paved and unpaved shared-use paths. ¹⁶⁰
Approximately 85 miles of the County-managed regional trail network are located in unincorporated King County; of those, 30 miles are paved, and 55 miles are soft-surface trails. Several cities, the Port of Seattle, and the state of Washington are responsible for the remaining portions of trail network. See Figure 4.4-2, Regional Trails System, for a visual representation of the trail network.

4.6.2.5 Marine Transportation

The marine transportation system within King County plays a key role in the movement of people and goods within King County, serving as the main commuter link between Seattle's central business district and the west Puget Sound corridor and serving as the hub network for local, regional, and international freight movements. Passenger ferry services provide reliable transportation as regional waterways are not subjected to the typical congestion of the roadway network.

Figure 4.6-4, Marine, Rail, and Air Travel, shows the marine transportation network. The marine facilities that serve King County include ferry terminals and vessels servicing ferry routes. Ferry services are provided by Washington State Ferries, the King County Marine Division, and Kitsap Transit. Other passenger-only ferry operators, such as Argosy and FRS Clipper, offer more recreational and travel-related services.

Vashon-Maury Island relies on WSDOT ferries and King County Water Taxi services.

4.6.2.6 Rail and Freight

Freight transport is a major function of the regional transportation system. Regional planning for freight is coordinated by PSRC and incorporated into the 2022–2050 PSRC Regional Transportation Plan. Key elements of the regional freight system include roadway corridors used for truck transport and railroads

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¹⁵⁹ King County, Americans with Disabilities Act Transition Plan, 2021. [LINK]

¹⁶⁰ King County, Parks and Recreation, Rural King County, 2023. [LINK]

used for train transport. See Figure 4.6-4, Marine, Rail, and Air Travel, which shows the rail and freight network.

WSDOT maintains a statewide Freight and Goods Transportation System that classifies the state's freight corridors by modes based on annual freight tonnage. Freight corridors primarily consist of the major interstate, U.S., and state highways in the county, in addition to major arterials that connect industrial and shipping areas throughout the county.

The Class I freight railroad system within King County includes the BNSF Railway and the Union Pacific Railroad, which primarily serve the inland transportation component of the supply chain for large volumes of import and export cargo moving through the Port of Seattle.

For passenger rail, Amtrak provides long-distance passenger rail service between Seattle and Chicago, Illinois (the Empire Builder) and Seattle and Los Angeles, California (the Coast Starlight). Ridership for both services declined from 2013 to 2019 but is expected to increase steadily through 2040. Amtrak also provides intercity passenger rail service, known as Amtrak Cascades, along the I-5 corridor between Eugene, Oregon, and Vancouver, British Columbia; the service is supported by WSDOT funding. Ridership for intercity rail is expected to increase steadily, pending WSDOT service investments.

Sound Transit's Sounder commuter rail uses diesel-powered locomotives and multilevel passenger coach trains that run on BNSF Railway freight tracks, while Sound Transit's Link light rail is electric powered and operates on its own dedicated tracks. Ridership for Sound Transit's passenger service is expected to increase as the Link system continues to expand.

4.6.2.7 Air Travel

Within King County, there is a network of 16 airports that play a critical role in the broader regional and national transportation network, serving as a vital conduit for swift and efficient intrastate, interstate, and international travel for both passengers and cargo. These airports vary widely in scale and function, encompassing key facilities, such as the Seattle-Tacoma International Airport and King County International Airport-Boeing Field, as well as supporting seaplane facilities and privately owned airstrips. Unincorporated King County airports include the state-owned Bandera airport located east of the City of North Bend and Skykomish Airport located east of the City of Skykomish, the King County Airport Special District Number One publicly owned and operated Vashon Airport on Vashon-Maury Island, the privately owned public Norman Grier Airfield east of the City of Covington, and smaller private airstrips. Figure 4.6-4, Marine, Rail, and Air Travel, shows the public airports network within King County.

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¹⁶¹ King County, 2024 King County Comprehensive Plan Public Review Draft, Appendix C: Transportation, June 2023. [LINK]

¹⁶² King County, GIS Open Data: Airports in King County, 2018. [LINK]

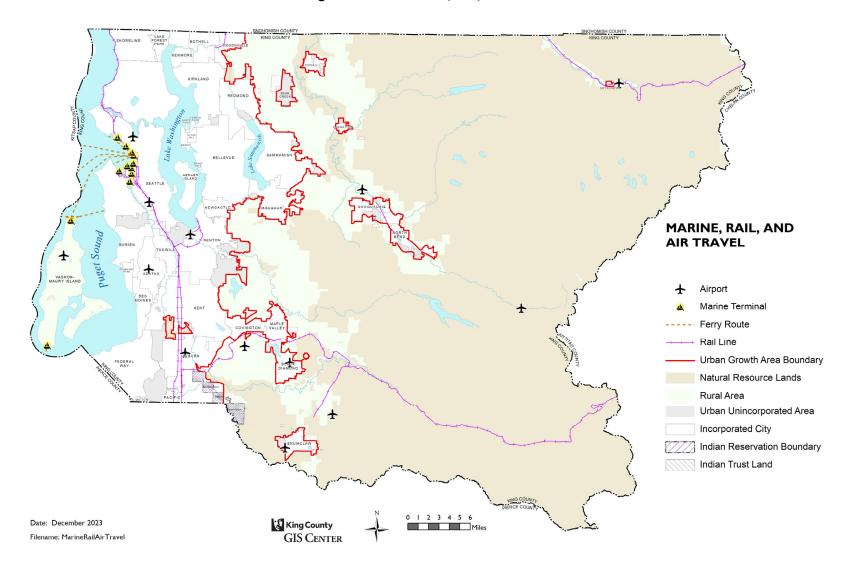


Figure 4.6-4. Marine, Rail, and Air Travel

4.6.3 Environmental Consequences

4.6.3.1 No Action Alternative

The No Action Alternative is the alternative with the least change to current traffic conditions and would maintain the current implementation of adopted policies, zoning, and regulations. According to the 2022 Comprehensive Plan Performance Measures Report, travel times have not worsened with population and job growth, though congestion remains high on many routes. The number of vehicle miles traveled has decreased per capita along with the percent share of single-occupancy vehicle commute trips. The vast majority of new homes (85 percent) and new jobs (92 percent) have been located near transit. With current policies and regulations, there would be a minor increase in traffic demand related to planned growth.

Investments in transit, transit-oriented development, and nonmotorized transportation facilities would continue at current levels. However, as mentioned previously, the Road Services Division faces a growing maintenance backlog and deficient revenue to address it, which could impact funding for future transportation infrastructure investments. Without adequate funding to operate and maintain the existing transportation infrastructure, there would likely be degradation of the existing roadway and nonmotorized transportation network. The County would need to identify new funding sources to continue to support future growth through the maintenance and development of the transportation system.

4.6.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

Potential changes under either of the action alternatives that would affect the transportation network include those that increase density allowances for residential areas—including for housing near transit and employment—those that add business growth through land use and zoning changes, and those that prioritize safety for nonmotorized transportation by contributing to the state Vision Zero goal, using a Safe Systems approach, and adopting complete street policies. Proposals that allow new or expanded uses, such as resorts or industrial facilities in the Rural Area or on Natural Resource Lands could also impact transportation. However, neither action alternative is anticipated to have significant adverse impacts.

Roads and Highways

Land use proposals that increase the number of dwelling units allowed in certain residential zones or increase the density of housing around transit and employment centers would likely generate more vehicular traffic that would operate on the surrounding roadway network in areas where development occurs. Similarly, land use and zoning changes that allow for resorts to develop in additional areas have the potential to generate more vehicular trips on the roadway network within the Rural Area and on Natural Resource Lands.

Currently, all the travel sheds within King County's development areas are meeting the current LOS standards and are open for development. Proposals that encourage increased density for residential development would primarily affect rural town and urban unincorporated areas; however, the level of impact of the proposed alternatives would depend on the location and the intensity of the redevelopment within specific travel sheds. As described above, five of the travel sheds currently have some portion of their roadway network that does not meet LOS standards, particularly the

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¹⁶³ King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

Woodinville/Duvall travel shed, which has 9 percent of roadways exceeding standards. Those travel sheds likely have less existing capacity to accommodate additional growth while meeting concurrency standards than the eight travel sheds that have all roadway segments operating below the LOS limits; however, all travel sheds have capacity to accommodate some level of future growth.

Transportation proposals that incorporate complete street standards have the potential to reduce the capacity of the existing roadway network if nonmotorized facilities such as sidewalks and bike lanes are added in locations that are constrained by right-of-way. If right-of-way is available to add nonmotorized facilities, or if the County acquires additional right-of-way, the costs associated with reconstructing roadways will likely increase due to the wider cross section, additional paving, and resulting impacts to drainage and utilities associated with those changes, thereby reducing the number of projects that could be constructed within the County's already underfunded roads budget.

Public Transit

The action alternative proposals could be beneficial to public transportation by increasing residential development near public transportation. King County Metro makes adjustments to transit services biannually in September and March of each year, in which the allocation of service hours or route adjustments may be updated based on changes in ridership, reliability, and available funding for transit service hours. Metro's adopted Service Guidelines provide direction on how and when to adjust service. It is anticipated that changes in ridership due to action alternatives that increase residential development and employment in areas near public transportation would be addressed through Metro's established biannual transit service adjustments process.

However, while King County Metro continues to make investments to grow its service network and improve reliability, it continues to face challenges that are outside its control. These include major transportation construction projects and traffic congestion within the county, staff shortages, and supply chain issues. ¹⁶⁴ As a result, Metro will need to continue to make service-level and route adjustments to align schedules with operational capacity and maintain service reliability, which may constrain its ability to increase service.

Nonmotorized Transportation

Transportation proposals that address serious injuries and fatalities, adopt a Safe System approach, and incorporate complete street standards have the potential to improve safety for pedestrians and bicyclists.

Marine, Rail, and Air Transportation

The action alternative proposals are not likely to affect marine, rail, and air transportation. Transportation proposals that would allow for more industrial zoning outside of the UGA may result in localized increases in truck freight activity to those areas where redevelopment occurs. However, the redevelopment for industrial land uses would have to meet the County's concurrency LOS standards before being approved for construction.

Comparison of Action Alternatives

Both action alternatives would have the same type of impact to the transportation network, therefore the difference between the action alternatives is in terms of the scale or intensity of the proposed changes.

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¹⁶⁴ King County, Metro Transit 2023 System Evaluation, November 2023. [LINK]

Attachment 2 2024 King County Comprehensive Plan Update Draft Environmental Impact Statement

Proposals related to land use and housing would likely create more transportation impacts under the Extensive Change Alternative through adoption of requirements or mandatory changes that would increase housing density within certain areas. Areas with more intensive redevelopment would likely have higher increases in traffic volumes, which could result in more congestion and result in additional roadway segments failing to meet LOS standards. However, as stated previously, even if a project results in additional roadway segment failing the LOS standard, it does not preclude all development in a travel shed as long as at least 85 percent of roadway segments in that travel shed are meeting LOS standards. All travel sheds currently have capacity to accommodate additional growth, but as shown in Table 4.6-2, 2022 Transportation Concurrency Test by Travel Shed, some travel sheds may be able to accommodate more intensive development than others.

The effects of the Extensive Change and Limited Change alternatives related to transit-oriented development may be similar. Both alternatives would encourage a greater use of public transit, which could help offset the potential increase in roadway congestion from a greater density of development. However, as stated previously, the County's ability to expand transit service is already constrained, and reallocation or reduction in service hours may result regardless of changes to land use policy or regulations.

Proposals related to transportation and public safety, such as Vision Zero, Safe System approach, and complete streets would be adopted under the Extensive Change Alternative whereas only encouraged under the Limited Change Alternative. Adopting proposals under the Extensive Change Alternative would require that safety design measures were included in all projects, increasing the safety of both motorized and nonmotorized users. As described above, adoption of these design standards could result in a potential reduction in roadway capacity or result in more significant cost increases for roadway projects to maintain the existing vehicular roadway capacity. That would result in more widespread changes than if the proposals were only encouraged in the Limited Change Alternative.

4.6.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable, significant adverse impacts to transportation are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that prevent or minimize potential impacts to transportation resources.

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4.7 Socioeconomics and Environmental Justice

This section discusses socioeconomics and environmental justice in King County and evaluates potential impacts that may be associated with the 2024 Update alternatives.

4.7.1 Existing Policy and Regulatory Framework

SEPA does not specifically provide guidance for an analysis of environmental justice effects. However, there are state- and county-level policies and orders in place that speak to environmental justice and equity considerations. Some of the primary laws, regulations, policies, and tools that provide the framework for equity and social justice analyses in King County include:

- Governor's Executive Order 93-07, Affirming Commitment to Diversity and Equity, which
 directed all state executive agencies and institutions of higher education to integrate principles
 of diversity into all facets of the workplace, commit to the elimination of all barriers to
 employment based on individual characteristics not related to job performance, and maintain
 affirmative action programs.¹⁶⁵ This order reestablished affirmative action and prohibited
 discrimination in state workplaces by recognizing that without intervention, there is inequity
 created through a history of systemic racism.
- The Healthy Environment for All Act, which was the first statewide law in Washington to create a coordinated state agency approach to environmental justice. Though it covers only seven state agencies, the Department of Ecology is included, and others may opt in. The Act requires these agencies to incorporate environmental justice as part of agency work, promote the equitable sharing of environmental benefits and investing in communities that experience the greatest environmental burdens, and requires the Department of Health to maintain and update the Environmental Health Disparities Map. 167
- K.C.C. Chapter 2.10, Performance, Management, and Accountability, which implements the "fair and just principle" defined in King County Ordinance 16948. The Ordinance requires equity and social justice foundational practices be applied to County actions and encourages the integration of such practices into the County's plans, management, budget, and reporting systems for accountability and performance. The documents describe determinants of equity as the social, economic, geographical, political, and physical conditions in which people in King County lead their lives that lead to the creation of a fair and just society. To create equity, all people must have full and equal access to opportunities that enable them to attain their full potential. To be "fair and just," the County promotes fairness and opportunity through actions to which equity and social justice foundational practices are applied.
- 2021 King County CPPs, which establish the framework for developing comprehensive plans, and include the guiding principle of "centering social equity and health" throughout.
- The Determinants of Equity and Data Tool, which provides data sources to measure community level indicators for 14 Determinants of Equity established in King County Ordinance 16948, plus an additional Determinant not yet adopted. These were originally described in the

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¹⁶⁵ Washington Governor Executive Order 93-07, Sept. 27, 1993. [LINK]

¹⁶⁶ State Bill 5141, 2021 Reg. Sess., 2021. [LINK]

¹⁶⁷ Washington State Department of Health, Washington Environmental Health Disparities Map, 2023. [LINK]

¹⁶⁸ King County, Office of Equity and Racial and Social Justice Determinants of Equity and Data Tool, 2023. [LINK]

Determinants of Equity Baseline Report that describes preliminary indicators for establishing a baseline of equity conditions in King County and have since been updated. 169

- 2020 SCAP, which provides a climate justice framework for King County.¹⁷⁰ The framework
 encourages the County to be coordinated across departments and responsive to the ways that
 communities identify with climate impacts regarding community resilience, health, and
 economic capacity. The framework identifies root causes, biological factors, and social factors
 that lead to increased sensitivity to climate change.
- King County Equity Impact Review Tool, which was created to evaluate County programs' impact
 on equity. The Equity Impact Review is a process and a tool to identify, evaluate, and
 communicate the potential impact of a policy or program on equity.¹⁷¹ The tool encourages
 agencies to consider how an action will affect and/or serve low-income populations,
 communities of color, and limited-English speaking residents to ensure equity.

4.7.2 Affected Environment

This section provides a demographic overview of the residents and the socioeconomic conditions within unincorporated King County. The values for similarly named attributes (e.g., total population) may vary across tables and figures in this section because of different years or data sources available at the time of writing. In some cases, a specific datapoint was selected to be consistent with other data references. Additionally, for some population demographics, the "universe" (the total number of people for whom the demographic describes) differs from total population. For example, the universe for people who speak languages other than English is the total population age five and older, not the total population overall.

4.7.2.1 Population Growth

As shown in Table 4.7-1, Population and Population Growth (2000–2050), the 2020 population of unincorporated King County was approximately 246,300, which is about 11 percent of the King County population as a whole. ¹⁷² Based on available U.S. Census data, while most incorporated cities within the county experienced growth between 2000 and 2020, there was a decline in growth in the unincorporated parts of King County during this period; see Figure 4.7-1, King County Population Estimates (2000–2020). This trend owes to population growth centered in cities and the annexation of unincorporated areas into cities and is consistent with King County's growth management strategy and the County's Urban Growth targets. ¹⁷³ Between 2006 and 2018, 54 percent of housing unit growth in King County occurred within the cities of Seattle and Bellevue, while 4 percent of housing unit growth occurred in urban unincorporated areas, and 3 percent occurred in rural unincorporated areas. ¹⁷⁴

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¹⁶⁹ King County, Office of Performance, Strategy and Budget, The Determinants of Equity: Identifying Indicators to Establish a Baseline of Equity in King County, 2015. [LINK]

¹⁷⁰ King County, 2020 SCAP as adopted in Motion 15866, 2021. [LINK]

¹⁷¹ King County, King County Equity Impact review Tool, 2010. [LINK]

¹⁷² U.S. Census Bureau, 2020 Census, 2022. [LINK]

¹⁷³ King County, Office of Economic and Financial Analysis Demographic Trends of King County, 2022. [LINK]

¹⁷⁴ King County, 2021 King County Urban Growth Capacity Report, 2021, page 30. [LINK]

Table 4.7-1. Population and Population Growth (2000–2050)

		Population and Population Growth ^a	
Year	King County	Unincorporated King County ^b	Washington
Population			
2000	1,737,000	349,200	5,894,100
2005	1,808,300	364,500	6,256,400
2010	1,931,200	300,200	6,733,300
2015	2,052,800	253,300	7,061,400
2020	2,269,700	246,300	7,706,300
2025	2,377,700	249,700	8,100,400
2030	2,487,400	253,200	8,502,800
2035	2,591,500	256,700	8,884,500
2040	2,690,900	260,100	9,248,500
2045	2,786,600	263,600	9,598,600
2050	2,879,200	267,000	9,937,600
Population Growth			
2000–05	4%	4%	6%
2005-10	7%	-21%	7%
2010–15	6%	-19%	5%
2015–20	11%	-3%	8%
2020–25	5%	1%	5%
2025–30	5%	1%	5%
2030–35	4%	1%	4%
2035–40	4%	1%	4%
2040–45	4%	1%	4%
2045-50	3%	1%	3%

Sources:

PSRC, Vision 2050, 2023. [LINK]; OFM Growth Management Act County Projections (Medium Series), 2022.

^a Population values are rounded to the nearest 100, and population growth percentages are rounded to the nearest 1%. The blue-shaded rows represent data based on projected populations.

^b To create population projections after 2020 for Unincorporated King County, urban unincorporated housing growth targets for 2019–2044 were added to a 2019 base and converted to population to estimate 2044. Urban unincorporated population was then added to the 2044 population projection for rural King County used in the growth target development process. Estimated population growth for 2020–2044 was annualized to interpolate and extrapolate values for 5-year increments, 2020–2050.

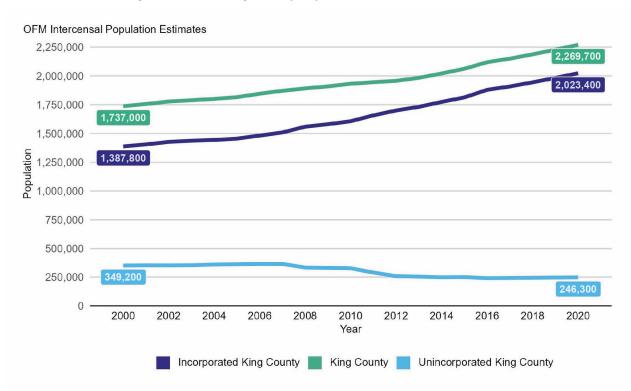


Figure 4.7-1. King County Population Estimates (2000–2020)

Sources: OFM Growth Management Act County Projections (Medium Series), 2022; King County, Public Review Draft of 2024 Comprehensive Plan, Appendix B: Housing Needs Assessment, 2023.

Population projections through 2050 for King County and unincorporated parts of the county are shown on Figure 4.7-2, King County Projected Population Growth (2000–2050). Between 2020 and 2050, the unincorporated county population is projected to increase by over 4 percent, reaching approximately 267,000 individuals. The King County population as a whole is projected to increase by about 27 percent during the same period. Though the growth rate is much smaller for the unincorporated areas of King County compared to the King County as a whole, these areas can still anticipate the addition of approximately 9,000 people over the next 30 years.

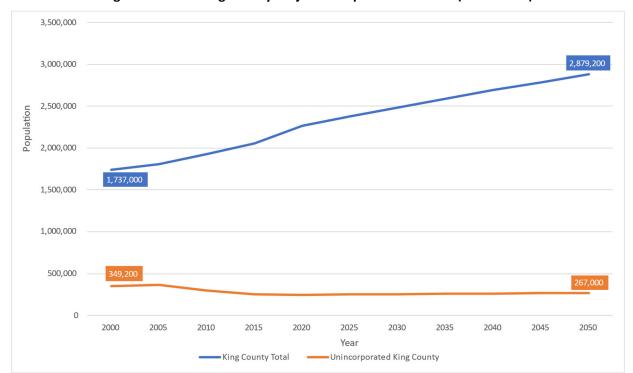


Figure 4.7-2. King County Projected Population Growth (2000–2050)

Sources: Puget Sound Regional Council (PSRC), Vision 2050, 2023; OFM Growth Management Act County Projections (Medium Series), 2022. Note: To create population projections after 2020 for Unincorporated King County, urban unincorporated housing growth targets for 2019–2044 were added to a 2019 base and converted to population to estimate 2044. Urban unincorporated population was then added to the 2044 population projection for rural King County used in the growth target development process. Estimated population growth for 2020–2044 was annualized to interpolate and extrapolate values for 5-year increments, 2020–2050.

¹⁷⁵ PSRC, Vision 2050, 2020. [LINK]

¹⁷⁶ OFM, Growth Management Act County Projections (Medium Series), 2022. [LINK]

4.7.2.2 Population Demographics

Race and Ethnicity

The racial and ethnic composition of the populations of King County as a whole, unincorporated King County, urban incorporated King County, rural King County, and Washington state are presented in Table 4.7-2, Race and Ethnicity Demographics. Populations in unincorporated King County, driven by rural King County, are less diverse than in the county overall, with many areas having lower percentages of all racial minority and ethnic groups compared to King County as a whole. Census data for unincorporated King County shows that approximately 64 percent of the population identifies as White, 13 percent as Asian, 7 percent as Two or More Races, and 9 percent as Hispanic or Latino.¹⁷⁷

In terms of minority communities, American Indian and Alaska Native (AIAN) is the only group that makes up a higher percentage of unincorporated area population relative to the King County as a whole. With an almost 79 percent White population, the percentages of all minority communities are lower in rural King County in comparison to urban unincorporated King County. Populations in urban unincorporated King County are more diverse than the county overall, with 53 percent of urban unincorporated area residents identifying as Black, Indigenous, or other People of Color communities. The urban unincorporated area has a greater share of Black and African American, Asian, and Hispanic or Latino residents than reflected in King County as a whole or rural King County.

Table 4.7-2. Race and Ethnicity Demographics

					Race				Ethnicity
Jurisdiction	Total Population	White	Black/ African American	AIAN	Asian	NHOPI	Other Race	Two or More Races Total	Hispanic or Latino ^a
King County	2,269,700	1,230,600	147,800	11,800	449,700	19,300	13,500	153,800	243,000
		54%	7%	<1%	20%	<1%	<1%	7%	11%
Unincorporated	246,300	151,400	12,600	2,300	31,500	1,400	1,500	16,700	22,900
King County		64%	5%	<1%	13%	1%	1%	7%	9%
Urban	118,700	57,000	11,600	800	25,000	1,200	700	8,000	14,400
Unincorporated King County		48%	10%	<1%	21%	1%	<1%	7%	12%
Rural King County	127,500	100,400	1,000	1,500	6,500	200	800	8,700	8,400
		79%	<1%	1%	5%	<1%	<1%	7%	7%
Washington State	7,705,300	5,130,900	307,600	121,500	730,600	64,900	513,100	836,700	1,059,200
		67%	4%	2%	10%	<1%	7%	11%	14%

Sources: King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

Notes: AIAN = American Indian and Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

Population values rounded to the nearest 100, and percentages rounded to the nearest 1%. Rounding may affect totals.

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^a Population may belong to any race.

¹⁷⁷ King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

Income-Related Measures

Table 4.7-3, Income and Unemployment Demographics, presents median household income and poverty rates for King County, unincorporated King County, and Washington state.

Table 4.7-3. Income and Unemployment Demographics

	Population	Median Household	Poverty	Unemployment
Jurisdiction	(2020)	Income	Rate	Rate
King County Total	2,269,700	\$99,200	9%	4%
Unincorporated King County	246,300	\$116,800	6%	4%
Urban Unincorporated KC	118,700	\$100,600	8%	5%
Rural King County ^a	127,500	\$126,500	5%	4%
Washington State	7,705,300	\$77,000	10%	5%
Unincorporated King County				
White	157,400	_	4%	4%
Black/African American	12,600	_	18%	9%
AIAN	2,300	_	15%	10%
Asian	31,500	-	6%	3%
NHOPI	1,400	_	12%	7%
Other Race	1,500	_	17%	4%
Two or More Races Total	16,700	-	8%	6%
Hispanic or Latino origin	22,900	_	13%	5%
Total King County by Race				
White	1,230,600	\$103,800	7%	4%
Black/African American	147,800	\$54,000	24%	8%
AIAN	11,800	\$52,300	19%	10%
Asian	449,700	\$114,300	9%	4%
NHOPI	19,400	\$73,300	14%	7%
Other Race	13,500	\$62,700	16%	5%
Two or More Races Total	153,800	\$82,100	11%	6%
Hispanic or Latino Origin (of any race)	243,000	\$71,100	14%	5%

Sources: King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020 and 2016–2020 5-year American Community Survey, 2022.

Notes: Population values rounded to the nearest 100, incomes rounded to the nearest \$100, and percentages rounded to the nearest 1%. Median household income values by race are suppressed for data availability and accuracy.

The median household income in unincorporated King County is \$116,800, with higher income in the rural unincorporated areas compared to urban unincorporated areas. King County overall has a median household income of approximately \$99,200, representing the highest median household income of all counties in Washington. Both unincorporated King County and King County as a whole have higher median household incomes compared to the state (\$77,000). While King County benefits from relatively

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^a Rural King County includes King County's unincorporated Rural Area and Natural Resource Lands.

¹⁷⁸ King County, Household Income in King County, 2023. [LINK]

Attachment 2 2024 King County Comprehensive Plan Update Draft Environmental Impact Statement

higher incomes, there are disparities in income by race, as well as by area. Looking at the county as a whole, Asian households have the highest median household income (\$114,300), followed by White households (\$103,800). AIAN households have the lowest median household income among King County households (\$52,300), with Black/African American households about the same (\$54,000). Median household income data by race and ethnicity are not readily available for the unincorporated part of the county. Income disparities are evident in some areas compared to the county. For example, in 2019, North Highline residents had a median household income of approximately \$58,000, while that for Skyway-West Hill residents was about \$71,000.¹⁷⁹

As shown in Table 4.7-3, Income and Unemployment Demographics, about 6 percent of the population in unincorporated King County lived below the federal poverty level compared to 9 percent in King County overall. In 2020, the federal poverty threshold was about \$13,200 for a one-person household. The data suggest that the poverty rates are higher for every racial and ethnic group other than White and Asian compared to that for the entire unincorporated King County. However, the poverty rates for every group are higher in King County as a whole relative to just unincorporated King County, except for those who identify as "Other Race."

In unincorporated King County, the Black/African American population has the highest poverty rate at 18 percent, followed by Other Race at 17 percent, AIAN at 15 percent, Hispanic or Latino at 13 percent, and NHOPI at 12 percent. The lowest poverty rates in unincorporated King County are associated with the White population at 4 percent, followed by 6 percent for the Asian population.

The unemployment rate is 4 percent for both unincorporated King County and King County as a whole, which is slightly lower than the state's unemployment rate of 5 percent. When broken down by race and ethnicity, unemployment rates are considerably higher for Black/African American, AIAN, and NHOPI populations in both unincorporated King County and King County as a whole. Like the poverty rate in unincorporated King County, all racial and ethnic groups except for White, Asian, and Other Race have higher unemployment rates than that for King County as a whole. The unemployment rates are very similar for King County as a whole and unincorporated King County. In unincorporated King County, the AIAN population has the highest unemployment rate (10 percent) followed by the Black/African American population (9 percent), NHOPI (7 percent), Two or More Races (6 percent), and Hispanic/Latino (5 percent).

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¹⁷⁹ King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

¹⁸⁰ King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020 and 2016–2020 5-year American Community Survey, 2022.

4.7.2.3 Other Social Indicators

Age and Gender

Table 4.7-4, Age Group Demographics, includes the number and percentage of population by age range in King County and unincorporated King County. Unincorporated King County has a higher share of population aged 19 or younger than King County overall. Unincorporated King County has a higher percentage of individuals between the ages of 50 to 80 compared to the King County as a whole and a significantly lower percentage of individuals between the ages 20 to 40.

Table 4.7-4. Age Group Demographics

	King	King County		ed King County
Age Group	Population	Percentage	Population	Percentage
0–9	251,100	11%	28,300	11%
10–19	256,200	11%	31,800	13%
20–29	344,700	15%	23,400	10%
30–39	395,800	17%	32,100	13%
40–49	310,800	14%	33,900	14%
50–59	279,400	12%	37,000	15%
60–69	229,500	10%	33,600	14%
70–79	133,400	6%	18,800	8%
80+	68,800	3%	7,300	3%
Total	2,269,700		246,300	

Sources: King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

Notes: Population values rounded to the nearest 100, and percentages rounded to the nearest 1%. Rounding may affect totals.

Table 4.7-5, Age and Gender Demographics, provides the numbers and percentages of youth (under 18 years) and elder (over 65 years) populations, as well as those for female and male populations in King County as a whole and unincorporated King County (for both urban unincorporated and rural King County). Compared to King County as a whole, unincorporated King County has a higher percentage of youth and elder population. The youth population is similar across the two geographies (20 to 22 percent), while the elder population is 4 percent higher for unincorporated King County as a whole. Urban unincorporated and rural portions of King County have similar percentages of youth population, while rural King County has a higher share of elder population. ¹⁸¹ In terms of gender distribution, King County, unincorporated King County, urban unincorporated King County, and rural King County are all within 1 percent of a 50/50 distribution.

Table 4.7-5. Age and Gender Demographics

	King County			Unincorporated Url King County		Urban Unincorporated King County		Rural King County	
	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	
Total Population	2,269,700		246,300		118,700		127,500		
Age ^a									
Youth Population	456,200	20%	54,800	22%	27,100	23%	27,700	22%	
Elder Population	306,200	13%	41,300	17%	18,100	15%	23,200	18%	
Gender									
Female Population	1,133,000	50%	122,200	50%	59,300	50%	62,900	49%	
Male Population	1,136,600	50%	124,000	50%	59,400	50%	64,600	51%	

Source: King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

Notes: Population values rounded to the nearest 100, and percentages rounded to the nearest 1%. Rounding may affect totals.

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^a Youth Population includes those under 18 years of age; Elder Population includes those over 65 years of age.

¹⁸¹ King County 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

Education

Table 4.7-6, Education Demographics, compares education level by number and percentage between King County, unincorporated King County, and Washington State. Unincorporated King County (6 percent), King County as a whole (6 percent), and Washington State (9 percent) have low percentages of the population with less than a high school diploma or equivalent. King County and unincorporated King County have similar levels of educational attainment, though King County as a whole has a greater share of residents with a graduate or professional degree (22 percent in King County compared to 17 percent in unincorporated King County), while unincorporated King County has a greater share of residents with a high school diploma (18 percent in unincorporated King County compared to 15 percent in King County). The greatest share of residents over age 25 in unincorporated King County and King County as a whole have a bachelor's degree (30 percent and 32 percent respectively), King County overall has a higher percentage of the population with some amount of college education (79 percent), which is similar to unincorporated King County (76 percent), and higher compared to Washington state's population (70 percent).

Table 4.7-6. Education Demographics

	King C	King County		Unincorporated King County		ton State
Education Level	Population	Percentage	Population	Percentage	Population	Percentage
Population 25 years and over	1,594,800		208,700		5,199,800	
Less than 9th grade	52,400	3%	5,400	3%	181,400	4%
9th to 12th grade, no diploma	52,500	3%	7,100	3%	250,000	5%
High school graduate (includes equivalency)	236,800	15%	38,100	18%	1,133,700	22%
Some college, no degree	274,400	17%	41,800	20%	1,201,500	23%
Associate's degree	126,900	8%	18,700	9%	525,900	10%
Bachelor's degree	506,000	32%	61,800	30%	1,183,900	23%
Graduate or professional degree	345,900	22%	35,700	17%	723,300	14%

Source: U.S. Census Bureau, 2016–2020 5-year American Community Survey for King County and Washington State, 2022. Notes: Population values rounded to the nearest 100, and percentages rounded to the nearest 1%. Rounding may affect totals.

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¹⁸² U.S. Census Bureau, 2016–2020 5-year American Community Survey for King County and Washington State, 2022.

Language

Table 4.7-7, Language Demographics, compares languages spoken at home and English proficiency for King County as a whole and unincorporated King County. Both populations have a majority of households that only speak English. For Unincorporated King County, the second most common language spoken at home is Spanish (6 percent). For the population of King County as a whole, Spanish was also the second most common language spoken at home (7 percent), followed by Chinese (4 percent), and then other Indo-European languages (4 percent) and Other Asian and Pacific Island Languages (4 percent). Unincorporated King County has a similar or lower percentage of households that speak a language other than English at home for every language when compared to King County as a whole. Unincorporated King County also has 7 percent more households that speak only English at home compared to King County as a whole.

Table 4.7-7. Language Demographics

	King C	county	Unincorporated King County		
Language Spoken at Home	Population	Percentage	Population	Percentage	
Only English	1,502,400	72%	158,700	79%	
Spanish	138,100	7%	11,400	6%	
Chinese, including Mandarin and Cantonese	91,800	4%	3,800	2%	
Russian, Polish, or other Slavic Languages	40,200	2%	4,200	2%	
Vietnamese	36,100	2%	4,000	2%	
Tagalog, including Filipino	27,000	1%	1,900	<1%	
Korean	23,000	1%	1,000	<1%	
French, Haitian, or Cajun	13,300	<1%	1,100	<1%	
German or other West Germanic Languages	10,700	<1%	1,000	<1%	
Arabic	10,100	<1%	600	<1%	
Other Indo-European Languages ^a	80,500	4%	3,400	2%	
Other Asian and Pacific Island Languages	76,100	4%	4,600	2%	
Other Languages not Listed	48,000	2%	4,600	2%	
Total ^b	2,097,200	-	200,100	-	
English Proficiency	Households	Percentage	Households	Percentage	
English Proficiency	848,000	94%	74,600	96%	
Limited English Proficiency	52,100	6%	3,100	4%	

Sources: U.S. Census Bureau, 2016–2020 5-year American Community Survey for King County and Washington State, 2022; King County, Public review Draft of 2024 Comprehensive Plan, Appendix B: Housing Needs Assessment, 2023.

Notes: Language spoken at home reported by number of individuals, and English proficiency reported by number of households. Population and household values rounded to the nearest 100, and percentages rounded to the nearest 1%. Rounding may affect totals.

^a Indo-European Languages include French, Haitian, Italian, Portuguese, German, Russian, Polish, Serbo-Croatian, Ukrainian or other Slavic languages, Armenian, Persian (including Farsi, Dari), Gujarati, Hindi, Urdu, Punjabi, Bengali, Nepali, Marathi or other Indic languages, other Indo-European languages (Albanian, Lithuanian, Pashto/Pushto, Romanian, Swedish), Telugu, Tamil, Malayalam, Kannada, or other Dravidian languages.

^b Total population in this table is the population age 5 and up.

Disabled Population

Table 4.7-8, Disabled Population Demographics, provides the numbers and percentages of disabled populations in King County as a whole, as well as in unincorporated King County. The percentage of the population with a disability in unincorporated King County is about the same as that in King County as a whole (9 percent and 10 percent, respectively). The breakdown of the population of King County having a disability by race and ethnicity indicates that many racial groups have a higher percentage of people with disabilities compared to the total population. For example, 17 percent of the AIAN population has a disability, followed by the Black/African American population (12 percent), and the NHOPI population (11 percent). People identifying as Other Race, Asian, Hispanic or Latino, and Two or More Races have lower percentages of disabled populations relative to the county percentage of those with a disability (10 percent).

Table 4.7-8. Disabled Population Demographics

	King County	Unincorporated King County
Total Population (2019) ^a	2,182,500	309,700
Disabled Population (2019)	206,400	28,500
Percentage of Total Population	10%	9%
Percent Population with a Disability by F	Race/Ethnicity ^b	
White alone	11%	-
Black/African American alone	12%	_
AIAN alone	17%	_
Asian alone	6%	_
NHOPI alone	11%	_
Other Race	6%	_
Two or More Races	9%	-
White alone, not Hispanic or Latino	11%	-
Hispanic or Latino Origin (of any race)	7%	_

Source: King County 2023 analysis of U.S. Census Bureau data, 2015-2019 5-year American Community Survey.

 $Note: Population\ values\ rounded\ to\ the\ nearest\ 100, and\ percentages\ rounded\ to\ the\ nearest\ 1\%.\ Rounding\ may\ affect\ totals.$

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 $[\]ensuremath{^{a}}$ Total population in this table is the civilian, noninstitutionalized population.

^b Race and ethnicity demographics for disabled populations are only available for King County as a whole, due to geography limitations to preserve confidentiality.

Housing Tenure

Table 4.7-9, Housing Tenure by Race and Ethnicity, includes both the numbers and percentages of households by tenure for King County as a whole and unincorporated King County. For King County as a whole, 57 percent of households own their homes, while 43 percent are renters. For unincorporated King County, the percentage of homeowners is higher (78 percent of households), and the percentage of renters is lower (22 percent of households). Further, the percentage of homeowners in rural unincorporated King County (83 percent) is higher than the percentage of homeowners within urban unincorporated King County (63 percent). The higher proportion of homeowners in unincorporated King County compared to King County as a whole, particularly in the Rural Area, may be an indicator that homes are more affordable to buy in unincorporated King County.

Table 4.7-9. Housing Tenure by Race and Ethnicity

	King C	ounty		ı	Jnincorporate	ed King Count	ty	
			Total Uning C	corporated county	Ru	ral	Url	oan
Tenure	Households	Percentage	Households	Percentage	Households	Percentage	Households	Percentage
Homeowner	502,300	57%	86,700	78%	58,200	83%	28,500	68%
Renter	379,700	43%	25,100	22%	11,700	17%	13,400	32%
Total Households	882,000		111,800		69,900		41,900	
	Homeowner	Renters	Homeowner	Renters				
White	61%	39%	88%	12%				
Black/African American	28%	72%	43%	57%				
AIAN	43%	57%	52%	48%				
Asian	58%	42%	75%	25%				
NHOPI	23%	77%	81%	19%				
Other Race	32%	68%	40%	60%				
Two or More Races	41%	59%	66%	34%				

Source: King County 2023 analysis of U.S. Census Bureau data; King County, Public review Draft of 2024 Comprehensive Plan, Appendix B: Housing Needs Assessment, 2023.

Note: Household values rounded to the nearest 100, and percentages rounded to the nearest 1%. Rounding may affect totals.

The table also indicates that while non-White households are more likely to rent their homes in King County as a whole, racial groups have higher rates of homeownership in unincorporated King County. In unincorporated King County, Other Race households, and Black/African American households are more likely to be renters (60 percent and 57 percent, respectively), while 48 percent of AIAN households, 34 percent of Two or More Race households, 25 percent of Asian households, 19 percent of NHOPI households, and 12 percent of White households rent their homes.¹⁸³

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¹⁸³ King County, 2023 analysis of U.S. Census Bureau data, Decennial Census, 2020.

Homelessness

Table 4.7-10, Sheltered and Unsheltered Individuals Experiencing Homelessness, looks at the living conditions for individuals experiencing homelessness in King County overall. Of the approximately 13,400 individuals experiencing homelessness in the county, approximately 7,600 of them are unsheltered (57 percent), while approximately 5,800 are sheltered (43 percent). These data are not readily publicly available for unincorporated King County.

Table 4.7-10. Sheltered and Unsheltered Individuals Experiencing Homelessness

Status	Number of Individuals
Unsheltered	7,600
Sheltered	5,800
Total	13,400

Source: King County, Public Review Draft of 2024 Comprehensive Plan, Appendix B: Housing Needs Assessment, 2023.

Table 4.7-11, Households Experiencing Homelessness by Race and Ethnicity of Head of Households, examines how homelessness trends differ by race in King County. It focuses on the percentage of households experiencing homelessness compared to the overall percentage of the county's population by race and ethnicity. White and Asian households experience homelessness at a lower percentage than their makeup in the overall population. However, every other racial group experiences a higher percentage of homelessness than their overall percentage in King County's population.

For example, AIAN households experience homelessness at rates nine times greater than their percentage of the county population, NHOPI households experience homelessness at rates over four times greater, and Black/African American households experience homelessness at rates over three times greater. These data are not readily publicly available for unincorporated King County.

Table 4.7-11. Households Experiencing Homelessness by Race and Ethnicity of Head of Households

Race/Ethnicity	Percentage of King County Households Experiencing Homelessness	Overall Percentage of King County Population
Total Households (2020)	882,000)
Total Population (2020)	2,269,70	0
White	48%	64%
Black/African American	25%	7%
AIAN	9%	1%
Asian	2%	21%
NHOPI	4%	<1%
Two or More Races	13%	6%
Hispanic or Latino ^a	17%	10%

Source: King County, Public Review Draft of 2024 Comprehensive Plan, Appendix B: Housing Needs Assessment, 2023 Notes: AIAN = American Indian and Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander.

 $Population\ values\ rounded\ to\ the\ nearest\ 100,\ and\ percentages\ rounded\ to\ the\ nearest\ 1\%.\ Rounding\ may\ affect\ totals.$

^a Population may belong to any race.

Housing Affordability

As discussed in detail in Section 4.3, Housing, the current supply of affordable housing is insufficient and especially affects individuals who are Black, Indigenous, and People of Color; people with disabilities; people with low incomes; and other people from historically underserved populations. In addition, housing costs in King County have also increased rapidly, with the median list prices increasing to \$850,000 in March 2022, or by 50 percent between July 2016 and March 2022 (see Section 4.3.2.3, Housing Affordability). Median rents in King County are slightly more affordable but are still out of reach for most low-income and other historically underserved populations. In the fourth quarter of 2022, the average rent for a 1-bedroom apartment was \$1,898 (see Section 4.3.2.3, Housing Affordability).

4.7.3 Environmental Consequences

4.7.3.1 No Action Alternative

Under the No Action Alternative, the County can anticipate a continuation of trends and the implementation of Current Plan policies related to health, equity, and social and environmental justice.

According to the 2022 Comprehensive Plan Performance Measures Report, progress is being made toward improving equity and socioeconomic conditions in the county, but improvements are still needed. Underproduction of housing continues to limit supply and contribute to lack of affordability. Housing cost burden is still high for low-income and renter households, particularly for those making less than 80 percent of AMI, and nearly 60 percent of urban unincorporated King County's development capacity is in neighborhoods with an elevated risk for displacement. Over 40 percent of residents in urban unincorporated King County do not live near healthy food options, and nearly half of urban unincorporated residents have limited access to nearby parks and open spaces.¹⁸⁴

As discussed in more detail in Section 4.3, Housing, housing is anticipated to become even less affordable over time as both rents and home prices continue to rise. This continued lack of affordability is due, at least in part, to the fact that housing supply is not keeping up with the pace of growth under the Current Plan. This, coupled with no significant change in the production and preservation of income-restricted housing, would continue to put pressure on the limited available affordable housing options for low-income and other underserved communities. The high housing costs increase financial burdens on vulnerable communities in both unincorporated King County and the county as a whole. It is anticipated that differential rates of homeownership by race and income will also continue to persist under the Current Plan. Some additional income-restricted units are anticipated to be developed in urban unincorporated King County, especially in Skyway-West Hill and North Highline where affordable units have been developed, but these would not be sufficient to meet the unmet and growing demand for affordable housing. In addition, an increase in the diversity of housing types under the No Action Alternative could result from King County potentially encouraging the development of ADUs within the UGA based on changes to the GMA.

Access to and availability of public transit options differentially affect low-income and other underserved populations and those who are unable to drive, such as elderly and youth. The network of public transit provides these groups access to places of work, health facilities, healthy food, and recreation opportunities. Per the discussion under the No Action Alternative in Section 4.6,

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¹⁸⁴ King County, 2022 Comprehensive Plan Performance Measures Report, March 2022. [LINK]

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Transportation, while current levels of investments in transit and transit-oriented development would continue, the Road Services Division faces a growing maintenance backlog and deficient revenue to address it. This would impact funding for future transportation infrastructure investments, resulting in further degradation of the existing roadway and nonmotorized transportation network, including routes to access public transit.

Access to parks and other recreation sites provides all residents opportunities to stay physically and emotionally healthy. Parks located in or near neighborhoods with low-income and other underserved households, or those that are accessible through public transport, can provide low-cost and healthy recreation to these groups. As elaborated in Section 4.4, Parks, Open Space, and Recreation, the King County Open Space Plan, along with other County initiatives, will continue to expand the parks and open space system under the No Action Alternative. This could lead to more parks in or near neighborhoods with low-income and other underserved households and potentially provide better access to healthy recreation to these communities.

4.7.3.2 Action Alternatives

Impacts Common to Both Action Alternatives

As described in Chapter 2, Proposed Action and Alternatives, the 2024 Update seeks to advance equitable outcomes around housing, health, and climate resiliency, particularly for historically underserved populations. The proposed action alternatives would generally result in these socioeconomic benefits through proposals that improve access to such things as affordable housing, parks and open space, public transit, and a healthy environment. As a result, no significant adverse socioeconomic impacts are expected under either of the action alternatives.

As elaborated in Section 4.3, Housing, under both action alternatives, it is anticipated that additional housing densities would be created in some residential zones through some of the action alternative proposals. These would not only increase the number of housing units within unincorporated King County, but also add more diversity to housing options. A diverse supply of lower-cost housing options created through the development of apartments, townhomes, duplexes, triplexes, fourplexes, or cottage-style detached housing would potentially increase affordable options for low-to moderate income- households and provide additional ownership opportunities for moderate-income households in an expensive housing market. Proposals such as changes to the Residential Density Incentive Program and inclusionary housing are especially anticipated to add income-restricted affordable housing production within King County. Therefore, compared to the No Action Alternative, both action alternatives would provide more housing options for low-income and other underserved communities within unincorporated King County.

While proposals to increase housing density near transit and employment areas would increase opportunities for affordable housing, they could also pose an increase in the risk of displacement for existing households and businesses as compared to the No Action Alternative. However, the extent of the risk is unknown as it would depend on the location and extent of any new developments. In addition, the action alternatives include proposed strategies and incentives to avoid displacements in addition to the existing laws and regulations that govern displacements and relocations.

Development of permanent and temporary emergency shelters is anticipated under both action alternatives. These could benefit extremely low-income individuals and households and those at the risk of becoming homeless in unincorporated King County.

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As described further in Section 4.4, Parks, Open Space, and Recreation, both action alternatives strive to expand and improve access to local parks, green spaces, open spaces, and recreational facilities in urban unincorporated areas and Opportunity Areas. To varying degrees, both action alternatives would increase such opportunities in urban unincorporated areas and address disparities in access to parks, open space, and recreational opportunities for underserved populations.

Comparison of Action Alternatives

As stated previously, both action alternatives would generally result in socioeconomic benefits through policies that improve access to such things as affordable housing, parks and open space, public transit, and a healthy environment for historically underserved populations. The key difference between the two action alternatives is the scale and intensity at which advances toward these equity goals are pursued.

Both action alternatives support proposals that could lead to an increase in the number of housing units and diversity of housing options available in unincorporated King County to add to the supply of affordable housing. However, such proposals would be pursued more aggressively under the Extensive Change Alternative compared to the Limited Change Alternative. For example, in comparison to the Limited Change Alternative, the Extensive Change Alternative would allow for a higher number of units per acre in the Urban Area and Rural Area, include stronger requirements to increase density development near transit and employment, include a greater expansion of inclusionary housing requirements, and make more extensive changes to the Residential Density Incentive Program to encourage more affordable housing.

The Extensive Change Alternative could pose a larger risk of displacement for existing households and businesses than the Limited Change Alternative, as proposals that increase density, particularly within existing urban areas near transit and employment centers, could increase land values and spur redevelopment, creating economic and physical displacement pressure. As stated previously however, the extent of that risk is unknown as it would depend on the location and extent of any new developments. At the same time, the Extensive Change Alternative includes more robust strategies and incentives than the Limited Change Alternative to address displacement through the protection and support of existing residents and businesses.

Both action alternatives would expand access to public spaces, recreational facilities, and trail access in urban unincorporated areas, and particularly within Opportunity Areas, which would help increase equitable access to parks, open spaces, and recreational resources. However, in comparison to the Limited Change Alternative, the Extensive Change Alternative would include requirements for construction of parks and open spaces as opposed to simply encouraging the construction of parks and open spaces. In addition, the Extensive Change Alternative would include more robust requirements to address heat islands through tree retention and green infrastructure, which would help contribute to a healthier outdoor environment.

4.7.4 Avoidance, Minimization, and Mitigation Measures

No unavoidable and significant adverse impacts to minority, low-income, and other underserved communities are expected under either the Limited Change Alternative or the Extensive Change Alternative, so no additional avoidance, minimization, or mitigation measures are required. Development under either alternative would be guided by existing regulations and policies that minimize potential disproportionate impacts to these groups.

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5.5 Distribution List

Auburn School District Enumclaw School District

Bellevue School District Federal Way School District

Cedar River Water and Sewer District Fife School District

City of Algona Highlands Sewer District
City of Auburn Highline School District
City of Bellevue Highline Water District
City of Black Diamond Issaquah School District
City of Bothell Kent School District

City of Burien

King County Department of Local Services

King County Department of Metro Transit

City of Clyde Hill King County Department of Natural Resources and

City of Covington Parks

City of Des Moines King County Fire District #2

City of Duvall

King County Fire Protection District No. 16

City of Enumclaw

King County Fire Protection District No. 20

City of Federal Way

King County Fire Protection District No. 27

City of Hunts Point

King County Fire Protection District No. 34

City of Issaquah

King County Fire Protection District No. 40

City of Kenmore

King County Fire Protection District No. 45

City of Kent

King County Fire Protection District No. 45

City of Kirkland King County Fire Protection District No. 50
City of Lake Forest Park King County Fire Protection District No.10 & 38

City of Maple Valley King County Parks Division

City of Medina King County Sheriff

City of Mercer Island

City of Milton

City of Newcastle

City of Normandy Park

City of Normandy Park

City of North Rend

King County Wastewater Division

King County Water District 119

King County Water District 125

King County Water District 19

City of North Bend

City of Pacific

City of Redmond

City of Renton

King County Water District 20

King County Water District 49

King County Water District 49

King County Water District 54

City of Sammamish King County Water District 90

City of SeaTac Kittitas County
City of Seattle Lake Forest Park Water District
City of Shoreline Lake Meridian Water District
City of Snoqualmie Lake Washington School District

City of Tukwila Lakehaven Water and Sewer District

City of Woodinville Mercer Island School District
City of Yarrow Point Midway Sewer District

Coal Creek Utility District Mountain View Fire and Rescue

Covington Water District

East Pierce Fire & Rescue

Enumclaw Fire Department

Muckleshoot Tribe

North City Water District

North Highline Fire District

Northeast Sammamish Sewer and Water District

Northshore School District Northshore Utility District

Pierce County

PSRC

Puget Sound Clean Air Agency Puget Sound Partnership

Puget Sound Regional Fire Authority (37&43)

Puyallup Tribe

Renton Regional Fire Authority & KC Fire

Protection District PD No. 25 Renton School District Riverview School District Samish Indian Nation

Sammamish Plateau Water and Sewer District

Seattle Public Utilities Seattle School District Shoreline Fire Department Shoreline School District Skykomish School District

Skyway Water and Sewer District

Snohomish County

Snoqualmie Pass Fire Department Snoqualmie Pass Utility District

Snoqualmie Tribe

Snoqualmie Valley School District

Soos Creek Water and Sewer District

Sound Transit

South King Fire and Rescue

Southwest Suburban Sewer District

Squaxin Island Tribe Stillaguamish Tribe Suquamish Tribe Tahoma School District

Town of Beaux Arts Village

Town of Skykomish Tukwila School District

Tulalip Tribe

Valley Regional Fire Authority Valley View Sewer District Vashon Island Fire and Rescue Vashon Island School District

Vashon Sewer District

WA Department of Fish and Wildlife
WA State Department of Archaeology
WA State Department of Commerce
WA State Department of Health

WA State Department of Natural Resources WA State Department of Transportation

WA State Department of Wildlife WA State Dept of Agriculture Woodinville Fire & Rescue Woodinville Water District

5.6 Special Status Species

The following tables support Section 3.3, Wildlife and Habitat. Table 5.6-1, Summary of Special Status Designations, describes the types of federal and state designations for listed species that are referenced in subsequent tables, including endangered, threatened, proposed endangered or threatened, candidate endangered or threatened, and sensitive species. Table 5.6-2, Special Status Animal Species in King County, lists the federally or state-listed animal species that are known or thought to occur in King County, in addition to those listed in the Current Plan and/or 2024 Update as Species of Local Importance. Table 5.6-3, Special Status Plant Species in King County, lists the federally or state-listed plant species that are known or thought to occur in King County.

 Table 5.6-1.
 Summary of Special Status Designations

	Federal Designations	Washington State Designations		
Endangered	Species in danger of extinction throughout all or a significant portion of its range.	Endangered	Species in danger of becoming extinct or extirpated from Washington.	
Threatened	Species likely to become Endangered in the foreseeable future.	Threatened	Species likely to become Endangered in Washington.	
Proposed	Species formally proposed for listing as Endangered or Threatened, but no formal rule yet.	Sensitive	Vulnerable, or declining species that could become Threatened or Endangered in Washington.	
Candidate	Species being evaluated for potential listing as Endangered or Threatened, but not formal proposal published yet.	Candidate	Species being evaluated for listing as Threatened or Endangered based on best available science.	

Source: WDFW, Understanding Conservation Categories for Washington Wildlife: Endangered and Protected, May 2023. [LINK]; U.S. Fish and Wildlife Service, Listing Status, 2023. [LINK]

Table 5.6-2. Special Status Animal Species in King County

			Listing Statu		Listing Status		•	s of Local ortance	
Animal Type	Common Name	Scientific Name	Federal	State	Current Plan	2024 Update			
Bird	American bittern	Botaurus lentiginosus			Yes	Yes			
Bird	American three-toed woodpecker	Picoides tridactylus				Yes			
Bird	Bald Eagle ^a	Haliaeetus leucocephalus				Yes			
Bird	Barrow's Goldeneye	Bucephala islandica			Yes	Yes			
Bird	Belted kingfisher	Ceryle alcyon			Yes	Yes			
Bird	Black Scoter	Melanitta nigra			Yes	Yes			
Bird	Black-Backed Woodpecker	Picoides arcticus		Candidate		Yes			
Bird	Bufflehead	Bucephala albeola				Yes			
Bird	Cinnamon teal	Anas cyanoptera			Yes	Yes			
Bird	Common Goldeneye	Bucephala clangula			Yes	Yes			
Bird	Common Loon	Gavia immer		Sensitive		Yes			
Bird	Golden Eagle	Aquila chrysaetos		Candidate		Yes			

Table 5.6-2. Special Status Animal Species in King County (continued)

			Listing Status		Species of Local Importance	
Animal Type	Common Name	Scientific Name	Federal	State	Current Plan	2024 Update
Bird	Great Blue Herona	Ardea herodias			Yes	Yes
Bird	Hairy Woodpecker	Picoides villosus			Yes	Yes
Bird	Harlequin Duck	Histrionicus histrionicus			Yes	Yes
Bird	Hooded merganser	Lophodytes cucullatus			Yes	Yes
Bird	Marbled Murrelet ^a	Brachyramphus marmoratus	Threatened	Endangered		Yes
Bird	Northern Goshawk ^a	Accipiter gentilis		Candidate		Yes
Bird	Northern Spotted Owla	Strix occidentalis	Threatened	Endangered		Yes
Bird	Olive-sided Flycatcher	Contopus cooperi			Yes	Yes
Bird	Oregon Vesper Sparrow	Pooecetes gramineus affinis	Under Review	Endangered		Yes
Bird	Osprey ^a	Pandion haliaetus			Yes	Yes
Bird	Pacific coast band-tailed pigeon	Columba fasciata			Yes	Yes
Bird	Peregrine Falcon ^a	Falco peregrinus				Yes
Bird	Pileated Woodpecker	Dryocopus pileatus				Yes
Bird	Purple Finch	Carpodacus purpureus			Yes	Yes
Bird	Purple Martin	Progne subis				Yes
Bird	Sooty grouse	Dendragapus fuliginosus			Yes	Yes
Bird	Surf Scoter	Melanitta perspicillata			Yes	Yes
Bird	Trumpeter Swan	Cygnus buccinator			Yes	Yes
Bird	Tundra Swan	Cygnus columbianus			Yes	Yes
Bird	Vaux's Swift ^a	Chaetura vauxi				Yes
Bird	Waterfowl Concentrations (Anatidae excluding Canada Geese in Urban Areas)	Varies				Yes
Bird	Western Grebe	Aechmophorus occidentalis		Candidate	Yes	Yes
Bird	Western High Arctic Brant	Branta bernicla			Yes	Yes
Bird	Western Meadowlark	Sturnella neglecta			Yes	Yes
Bird	Western Washington nonbreeding concentrations of Barrow's Goldeneye (<i>Bucephala</i> <i>islandica</i>), Common Goldeneye (<i>Bucephala</i> <i>clangula</i>), and Bufflehead (<i>Bucephala albeola</i>)	Varies				Yes
Bird	Western Washington nonbreeding	Varies				Yes

Table 5.6-2. Special Status Animal Species in King County (continued)

Animal Type			Listing Status		Species of Local Importance	
	Common Name	Scientific Name	Federal	State	Current Plan	2024 Update
	concentrations of plovers (Charadriidae) and sandpipers (Scolopacidae), and phalaropes (Phalaropodidae)					
Bird	White-winged Scoter	Melanitta fusca			Yes	Yes
Bird	Wood duck	Aix sponsa			Yes	Yes
Bird	Yellow-Billed Cuckoo	Coccyzus americanus	Threatened	Endangered		Yes
Fish	Bocaccio Rockfish	Sebastes paucispinis	Endangered			Yes
Fish	Brown Rockfish	Sebastes auriculatus				Yes
Fish	Bull Trout	Salvelinus confluentus	Threatened	Candidate		Yes
Fish	Canary Rockfish	Sebastes pinniger	Threatened			Yes
Fish	Chinook Salmon (Puget Sound)	Oncorhynchus tshawytscha	Threatened			Yes
Fish	Chum salmon	Oncorhynchus keta			Yes	Yes
Fish	Coastal resident/searun cutthroat	Oncorhynchus clarki clarki			Yes	Yes
Fish	Coho/silver salmon	Oncorhynchus kisutch			Yes	Yes
Fish	Copper rockfish	Sebastes caurinus				Yes
Fish	Dolly Varden	Salvelinus malma			Yes	Yes
Fish	English sole	Parophrys vetulus			Yes	Yes
Fish	Kokanee salmon	Oncorhynchus nerka			Yes	Yes
Fish	Lingcod	Ophiodon elongatus			Yes	Yes
Fish	Longfin smelt	Spirinchus thaleichthys			Yes	Yes
Fish	Olympic mudminnow	Novumbra hubbsi		Sensitive		Yes
Fish	Pacific herring	Clupea pallasii			Yes	Yes
Fish	Pacific lamprey	Entosphenus tridentatus				Yes
Fish	Pacific sand lance	Ammodytes hexapterus			Yes	Yes
Fish	Pink salmon	Oncorhynchus gorbuscha			Yes	Yes
Fish	Pygmy whitefish	Prosopium coulteri		Sensitive		Yes
Fish	Quillback rockfish	Sebastes maliger				Yes
Fish	Rainbow trout	Oncorhynchus mykiss			Yes	Yes
Fish	Sockeye/red salmon	Oncorhynchus nerka			Yes	Yes
Fish	Southern rock sole	Pleuronectes bilineatus			Yes	Yes
Fish	Steelhead (Puget Sound)	Oncorhynchus mykiss	Threatened	Candidate		Yes
Fish	Surf smelt	Hypomesus pretiosus			Yes	Yes
Fish	Western river lamprey	Lampetra ayresii		Candidate	Yes	Yes
Fish	White sturgeon	Acipenser transmontanus			Yes	Yes

Table 5.6-2. Special Status Animal Species in King County (continued)

Animal Type			Listing Status		Species of Local Importance	
	Common Name	Scientific Name	Federal	State	Current Plan	2024 Update
Fish	Yelloweye rockfish	Sebastes ruberrimus	Threatened			Yes
Mammal	California sea lion	Zalophus californianus				Yes
Mammal	Cascade red fox	Vulpes vulpes cascadensis		Endangered		Yes
Mammal	Columbian black-tailed deer	Odocoileus hemionus columbianus			Yes	No
Mammal	Dall's porpoise	Phocoenoides dalli				Yes
Mammal	Douglas squirrel	Tamiasciurus douglasii				Yes
Mammal	Fisher	Martes pennanti		Endangered		Yes
Mammal	Gray whale	Eschrichtius robustus	Endangered	Sensitive		Yes
Mammal	Gray wolf ^b	Canis lupus	Endangered	Endangered		Yes
Mammal	Harbor porpoise	Phocoena phocoena		Candidate		Yes
Mammal	Harbor seal	Phoca vitulina				Yes
Mammal	Hoary marmot	Marmota caligata				Yes
Mammal	Killer (Orca) whale	Orcinus orca	Endangered	Endangered		Yes
Mammal	Mink	Mustela vison			Yes	No
Mammal	Mountain goat	Oreamnos americanus			Yes	Yes
Mammal	Northern flying squirrel	Glaucomys sabrinus				Yes
Mammal	Pacific marten	Martes caurina			Yes	Yes
Mammal	Pika	Ochotona princeps			Yes	Yes
Mammal	Roosevelt elk	Cervus canadensis roosevelti			Yes	Yes
Mammal	Steller sea lion	Eumetopias jubatus				Yes
Mammal	Townsend chipmunk	Tamias townsendii				Yes
Mammal	Townsend's big-eared bata	Corynorhinus townsendii		Candidate		Yes
Mammal	Wolverine	Gulo gulo	Proposed Threatened	Candidate		Yes
Amphibian	Larch mountain salamander	Plethodon larselli		Sensitive		Yes
Amphibian	Northern red-legged frog				Yes	Yes
Amphibian	Oregon spotted frog	Rana pretiosa	Threatened	Endangered		Yes
Amphibian	Western toad	Bufo boreas		Candidate		Yes
Reptile	Northwestern pond turtle	Actinemys marmorata	Proposed Threatened	Endangered		Yes
Reptile	Western fence lizard	Sceloporus occidentalis			Yes	Yes
Mollusk	Blue-gray taildropper	Prophysaon coeruleum		Candidate		Yes
Mollusk	Butter clam	Saxidomus giganteus				Yes
Mollusk	Native littleneck clam	Leukoma staminea				Yes
Mollusk	Olympia oyster	Ostrea lurida				Yes

Table 5.6-2. Special Status Animal Species in King County (continued)

			Listing Status		Species of Local Importance	
Animal Type	Common Name	Scientific Name	Federal	State	Current Plan	2024 Update
Mollusk	Oregon floater	Anodonta oregonensis			Yes	Yes
Mollusk	Pacific geoduck	Panopea generosa			Yes	No
Mollusk	Pacific oyster	Crassostrea gigas			Yes	No
Mollusk	Western floater	Anodonta kennerlyi			Yes	No
Mollusk	Western pearlshell mussel	Margaritifera falcata			Yes	Yes
Mollusk	Western ridged mussel	Gonidea angulata			Yes	Yes
Shellfish	Dungeness crab	Cancer magister			Yes	Yes
Shellfish	Pandalid shrimp	Pandalus species			Yes	Yes
Arthropod	Beller's ground beetle	Agonum belleri		Candidate		Yes
Arthropod	Hatch's click beetle	Eanus hatchii		Candidate		Yes
Arthropod	Johnson's hairstreak	Mitoura johnsoni		Candidate		Yes
Arthropod	Pacific clubtail	Phanogomphus kurilis		Candidate		Yes
Arthropod	Valley silverspot	Speyeria zerene bremnerii		Candidate		Yes
Arthropod	Western bumble bee	Bombus occidentalis	Under Review	Candidate		Yes

Source: King County DNRP 2023.

Table 5.6-3. Special Status Plant Species in King County

Common Name	Scientific Name	Federal Status	State Status
Tall bugbane	Actaea elata var. elata		Sensitive
Swamp sandwort	Arenaria paludicola	Endangered	
Triangular-lobed moonwort	Botrychium ascendens	Sensitive	Threatened
Western moonwort	Botrychium hesperium	Sensitive	Sensitive
Stalked moonwort	Botrychium pedunculosum	Threatened	Sensitive
Harvest brodiaea	Brodiaea rosea ssp. rosea		Sensitive
Alaska harebell	Campanula lasiocarpa	Sensitive	Sensitive
Few-flowered sedge	Carex pauciflora	Sensitive	Sensitive
Northern beaked sedge	Carex rostrata	Sensitive	Sensitive
Long-styled sedge	Carex stylosa	Sensitive	Sensitive
Clubmoss mountain-heather	Cassiope lycopodioides	Sensitive	Sensitive
Golden paintbrush ^a	Castilleja levisecta		Threatened
Golden chinquapin	Chrysolepis chrysophylla var. chrysophylla	Sensitive	Sensitive
Weak thistle	Cirsium remotifolium var. remotifolium	Sensitive	Endangered
Spleenwort-leaved goldthread	Coptis asplenifolia	Sensitive	Sensitive

^a Species with special regulations in King County Code.

 $^{^{\}mbox{\scriptsize b}}$ Not presently in King County, but former range is in the Cascade Mountains of King County.

Table 5.6-3. Special Status Plant Species in King County (continued)

Common Name	Scientific Name	Federal Status	State Status
Tree clubmoss	Dendrolycopodium dendroideum	Sensitive	Sensitive
Spotted Joe-pye weed	Eutrochium maculatum var. bruneri		Sensitive
Kamchatka fritillary	Fritillaria camschatcensis	Sensitive	Sensitive
Swamp gentian	Gentiana douglasiana	Sensitive	Sensitive
Oregon goldenweed	Heterotheca oregona	Sensitive	Sensitive
Large St. Johns'-wort	Hypericum majus	Sensitive	Sensitive
Pacific peavine	Lathyrus vestitus var. ochropetalus		Endangered
Water lobelia	Lobelia dortmanna		Sensitive
Northern bog clubmoss	Lycopodiella inundata	Sensitive	Sensitive
One-cone clubmoss	Lycopodium lagopus	Sensitive	Sensitive
White meconella	Meconella oregana	Sensitive	Endangered
Branched meconella	Montia diffusa	Sensitive	Sensitive
Old field blue toadflax	Nuttallanthus canadensis		Sensitive
Texas blue toadflax	Nuttallanthus texanus		Sensitive
Brewer's cliffbrake	Pellaea breweri	Sensitive	Sensitive
Whitebark pine	Pinus albicaulis	Proposed Threatened	Sensitive
Choriso's bog-orchid	Platanthera chorisiana	Sensitive	Sensitive
Columbia white-topped aster	Sericocarpus rigidus	Sensitive	Sensitive
Flat-leaved bladderwort	Utricularia intermedia	Sensitive	Sensitive

Source: Washington Natural Heritage Program, 2021 Washington Vascular Plant Species of Conservation Concern, 2021. [LINK]

Notes: All plant species listed in the table above have been added to the King County Species of Local Importance list for the 2024 Update and are not currently listed in the Current Plan.

^a Federally delisted as of August 18, 2023, from the U.S. Fish and Wildlife Service Endangered Species Act list. [LINK]